

**Figure SF1. Cumulative Incidence Plots for Suicide Attempts and Other Self-Directed Violence for COVID-19 and Matched Comparator Groups and Stratified by Sex**

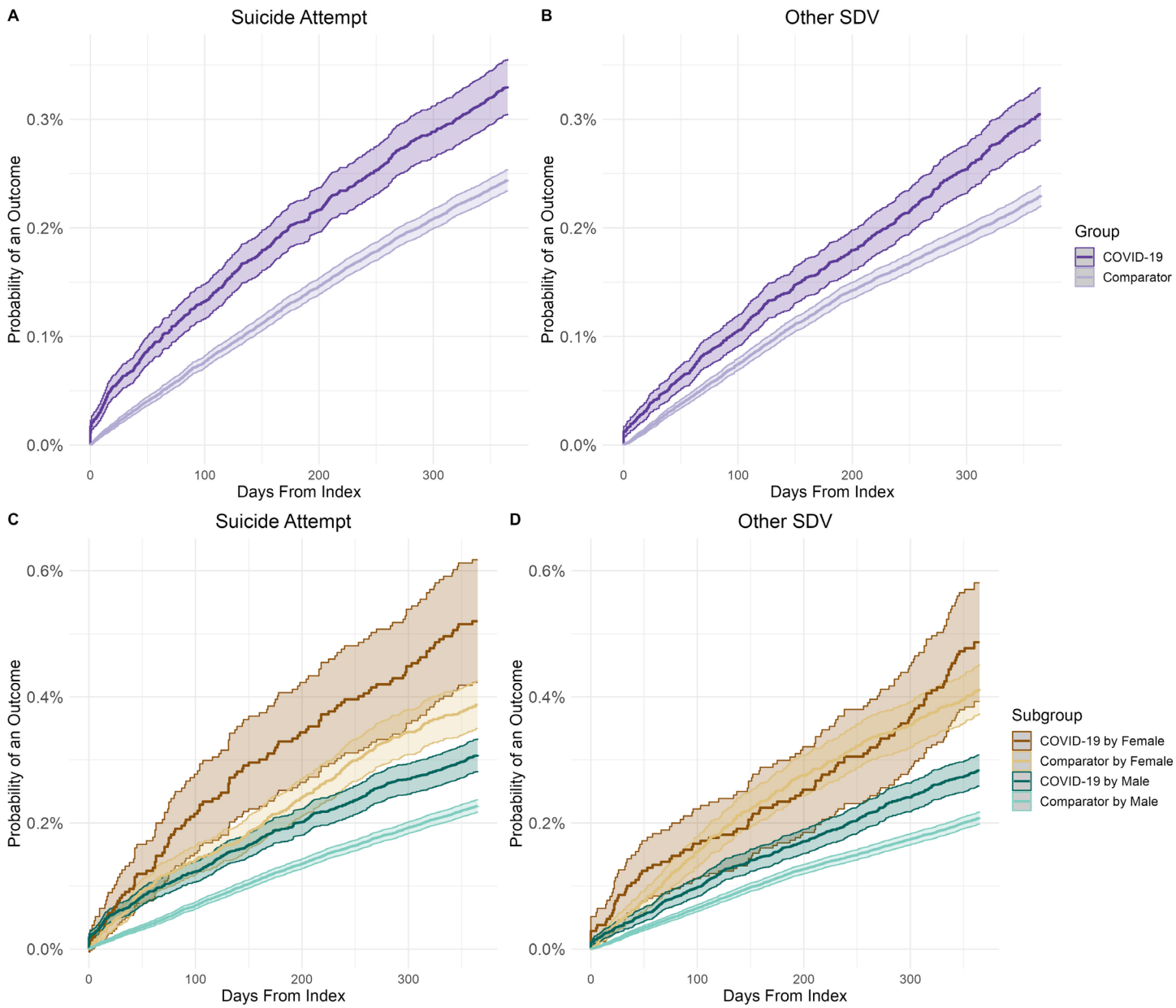


Figure SF1 Footnote: Cumulative Incidence Plots of the COVID-19 and Matched Comparator Groups for (A) Suicide Attempts, (B) Other Self-Directed Violence, (C) Suicide Attempts stratified by sex, and (D) Other Self-Directed Violence stratified by sex.

**Figure SF2. Cumulative Incidence Plots for Suicide Attempts and Other Self-Directed Violence Stratified by Prior Suicide Attempt or Other SDV Event and by Prior Mental Health Visits in Two Years Prior to Index**

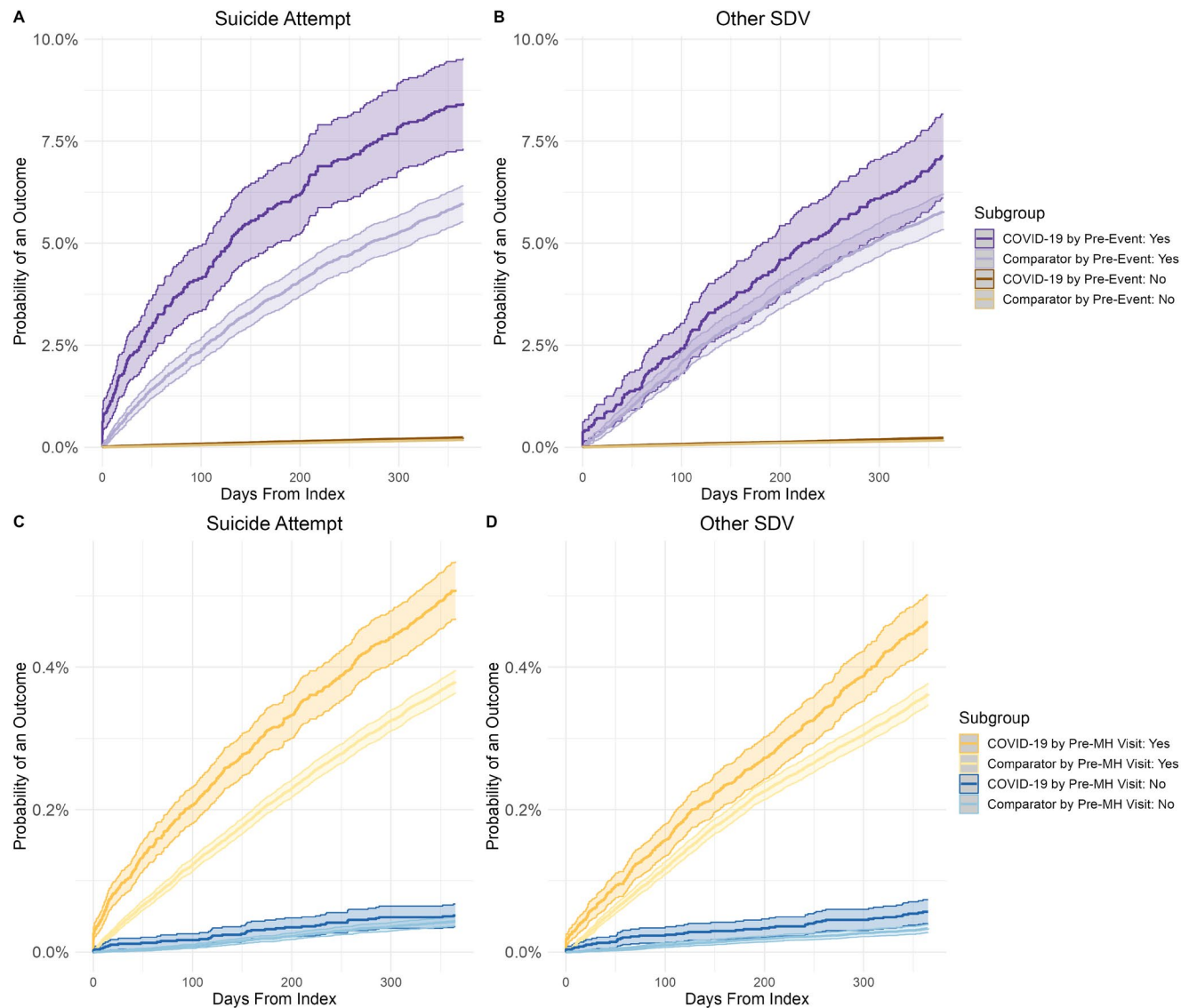


Figure SF2 Footnote: Cumulative Incidence Plots of the COVID-19 and Matched Comparator Groups for (A) Suicide Attempts stratified by prior suicide attempt or other SDV event, (B) Other Self-Directed Violence stratified by prior suicide attempt or other SDV event (C), Suicide Attempts stratified by prior mental health visits, and (D) Other Self-Directed Violence stratified by prior mental health visits. Vertical scale for probability of outcome differs between A/B and C/D. Abbreviations: MH: mental health.

**Figure SF3: Cumulative Incidence Plots for Suicide Attempts and Other Self-Directed Violence Stratified by Race and by Ethnicity**

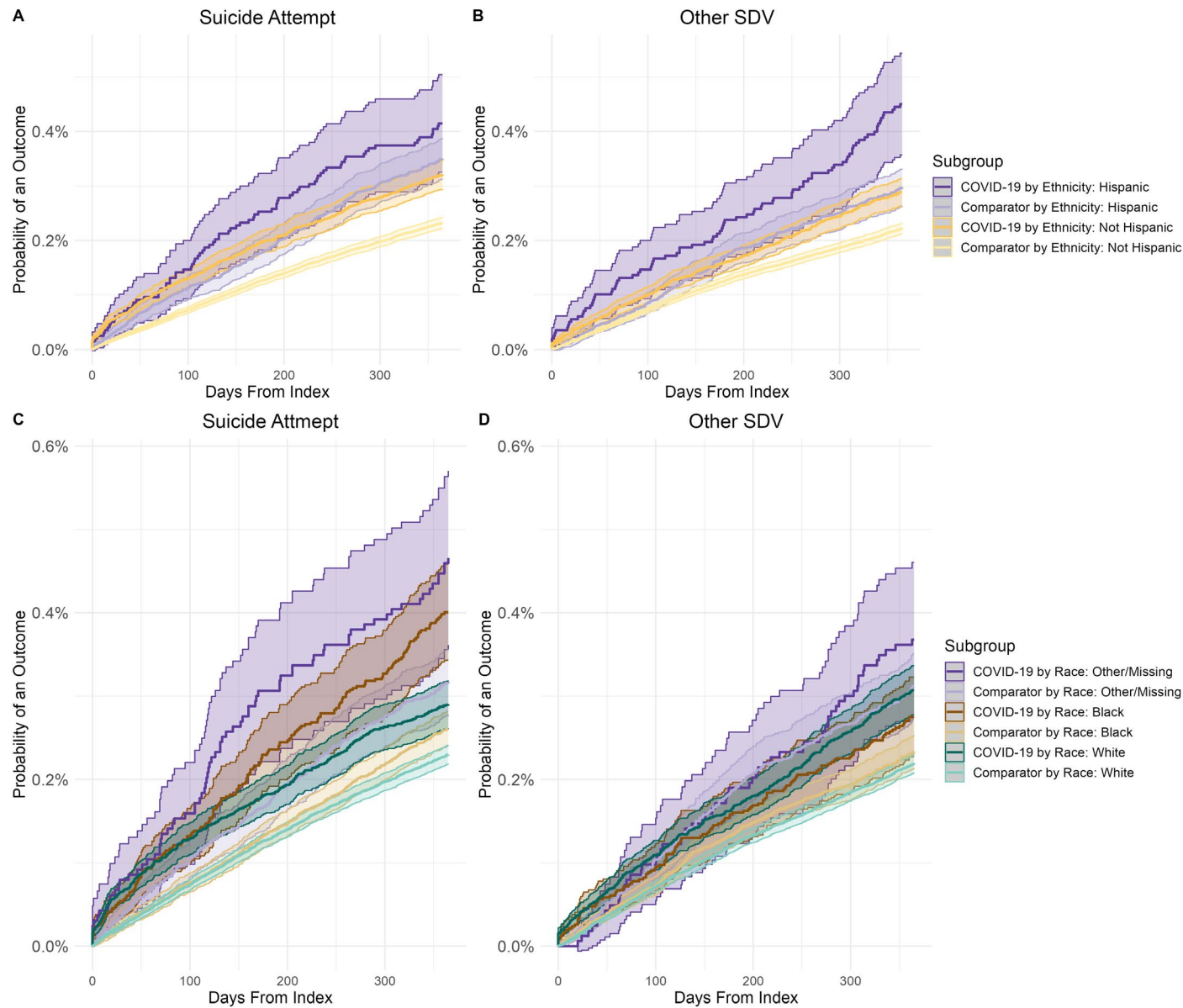


Figure SF3 Footnote: Cumulative Incidence Plots of the COVID-19 and Matched Comparator Groups for (A) Suicide Attempts stratified ethnicity, (B) Other Self-Directed Violence stratified by ethnicity, (C) Suicide Attempts stratified by race, and (D) Other Self-Directed Violence stratified by race.

**Table ST1. Specification of the Target Trial and Its Emulation**

	<b>Unethical Target Trial</b>	<b>Emulation</b>
<b>Goal</b>	To test the effect of individual infection with SARS-CoV-2 on Suicide Attempts and other Self-Directed Violence	Same
<b>Setting</b>	VA nationwide system	Same
<b>Inclusion Criteria</b>	Veterans aged 18 and above in care in the VHA with an assigned primary care team for at least two years on randomization date, or who had at least one VHA primary care clinic visit in that period	Same
<b>Exclusion Criteria</b>	<p>Previous SARS-CoV-2 Infection</p> <p>Address outside of DC or 50 States</p>	<p>Previous documented SARS-CoV-2 Infection in National Surveillance tool or Medicare-documented COVID-19 diagnosis or related diagnostic codes (ICD-10: B97.29, U07.1, J12.82, 179 Z86.16) listed in fee-for-service Medicare claims</p> <p>Address outside of DC or 50 States</p> <p>Missing or invalid key matching variables: CAN score, age, height, weight, ZIP code</p> <p>No suitable matches between SARS-CoV-2 infected patients and Comparator</p>
<b>Enrollment Period</b>	March 1, 2020-March 31, 2021	Same
<b>“Treatment” Strategies</b>	Inoculum of SARS-CoV-2 sufficient to guarantee SARS-CoV-2 infection	SARS-CoV-2 Infection with a confirmatory PCR test for SARS-CoV-2 in VA National Surveillance Tool

<b>Comparator</b>	Double-blinded inoculum of placebo	Best matched Veteran with neither documented SARS-CoV-2 Infection in National Surveillance tool nor Medicare-documented COVID-19 diagnosis through the month at which matched as a comparator
<b>Approach to balancing confounders</b>	1:1 Randomization	Up to 5:1 (Comparator : COVID-19 group) Matching on 5 exact criteria and 37 propensity score criteria from VA data
<b>Primary Outcome and Follow-up</b>	Patient reported suicide attempts or self-directed violence during days 1-30, 31-365, and one year after the index date	Suicide attempt or self-directed violence reported by patients to their VHA provider and recorded in the VA Office of Mental Health and Suicide Prevention (OMHSP) and electronic health records
<b>Follow-up Period</b>	1 year from inoculation	1 year from the earliest date of a documented positive test for those with SARS-CoV-2 infection; comparators began surveillance for outcomes from the same date ("index date", the emulated equivalent of "randomization and inoculation date") as that of their individually matched COVID-19 patient and were followed for 1 year
<b>Planned Subgroup Analyses</b>	5 age groups, 2 sexes	Same
<b>Causal Contrast</b>	<p>Primary Analysis: Intention-to-Treat (ITT) without censoring</p> <p>Sensitivity analysis: Per-Protocol censoring if Comparator develops SARS-CoV-2 infection</p>	<p>Primary Analysis: ITT without censoring</p> <p>Sensitivity analyses: Observational analog of the per-protocol effect, using multiple approaches given the 5:1 match rather than 1:1 in the Target Trial: PP1, which excludes individual Comparators at the follow-up moment when that comparator develops an infection; PP2, which excludes the matched</p>

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strata at the moment of first infection in any  
of the matched Comparators in that strata.

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**Statistical  
analysis**

Cox regression model to  
estimate the time to event.  
Stratification analysis for  
subgroups.

Same

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Table ST1 Footnote: Abbreviations: VHA Veterans Health Administration; SARS-CoV-2 Severe acute respiratory syndrome coronavirus version 2; PCR polymerase chain reaction; COVID-19 Coronavirus disease 2019; ICD-10 International classification of disease tenth edition clinical modification; CAN Care Assessment Need Score; OMHSP Office of Mental Health and Suicide Prevention; ITT Intent to treat; PP Per protocol

**Table ST2. Cox Regression Models for Suicide Attempts & Other Self-Directed Violence: Comparing Intent to Treat and Per Protocol Models with Additional Censoring**

	Group	No. Persons	No. Persons with Events (%)	Rate per 100,000 PY	No. Persons Censored for Any Death (%)	No. Persons Censored for Crossover (%)	Hazard Ratio	HR CI	P-Value
Short-Term Outcomes									
Suicide Attempts									
Intent to Treat	COVID-19	198,938	127 (0.06)	798	9,147 (4.60)	-	2.54	(2.05, 3.15)	<0.001
	Comparator	992,036	255 (0.03)	313	3,657 (0.37)	-			
Per Protocol 1	COVID-19	198,938	127 (0.06)	798	9,147 (4.60)	-	2.54	(2.05, 3.15)	<0.001
	Comparator	992,036	255 (0.03)	314	3,583 (0.36)	3,312 (0.33)			
Per Protocol 2	COVID-19	198,938	126 (0.063)	797	6,791 (3.41)	3,206 (1.61)	2.52	(2.03, 3.13)	<0.001
	Comparator	992,036	255 (0.026)	315	2,732 (0.28)	16,892 (1.70)			
Other SDV									
Intent to Treat	COVID-19	198,938	85 (0.04)	534	9,147 (4.60)	-	1.94	(1.51, 2.49)	<0.001
	Comparator	992,036	224 (0.02)	275	3,657 (0.37)	-			
Per Protocol 1	COVID-19	198,938	85 (0.04)	534	9,147 (4.60)	-	1.95	(1.51, 2.50)	<0.001
	Comparator	992,036	223 (0.02)	274	3,583 (0.36)	3,311 (0.33)			
Per Protocol 2	COVID-19	198,938	85 (0.04)	537	6,790 (3.41)	3,206 (1.61)	1.95	(1.51, 2.5)	<0.001
	Comparator	992,036	223 (0.02)	276	2,732 (0.28)	16,897 (1.70)			
Long-Term Outcomes									
Suicide Attempts									
Intent to Treat	COVID-19	198,938	555 (0.28)	328	17,347 (8.72)	-	1.30	(1.19, 1.43)	<0.001
	Comparator	992,036	2,223 (0.22)	250	42,894 (4.32)	-			
Per Protocol 1	COVID-19	198,938	555 (0.28)	328	17,347 (8.72)	-	1.28	(1.16, 1.40)	<0.001
	Comparator	992,036	2,212 (0.22)	256	39,430 (3.98)	50,728 (5.11)			
Per Protocol 2	COVID-19	198,938	495 (0.249)	332	12,840 (6.45)	43,037 (21.63)	1.34	(1.21, 1.48)	<0.001
	Comparator	992,036	1,930 (0.195)	247	30,818 (3.11)	225,458 (22.73)			
Other SDV									
Intent to Treat	COVID-19	198,938	534 (0.27)	315	17,344 (8.72)	-	1.32	(1.20, 1.45)	<0.001
	Comparator	992,036	2,102 (0.21)	237	42,907 (4.33)	-			
Per Protocol 1	COVID-19	198,938	534 (0.27)	315	17,344 (8.72)	-	1.29	(1.17, 1.42)	<0.001
	Comparator	992,036	2,095 (0.21)	242	39,439 (3.98)	50,750 (45.12)			

	Group	No. Persons	No. Persons with Events (%)	Rate per 100,000 PY	No. Persons Censored for Any Death (%)	No. Persons Censored for Crossover (%)	Hazard Ratio	HR CI	P-Value
Per Protocol 2	COVID-19	198,938	465 (0.23)	312	12,455 (6.26)	37,447 (18.82)	1.33	(1.2, 1.47)	<0.001
	Comparator	992,036	1,815 (0.18)	232	28,234 (2.85)	196,080 (19.77)			
One-Year Outcomes									
Suicide Attempts									
Intent to Treat	COVID-19	198,938	657 (0.33)	355	17,337 (8.72)	-	1.41	(1.30, 1.54)	<0.001
	Comparator	992,036	2,421 (0.24)	250	42,885 (4.32)	-			
Per Protocol 1	COVID-19	198,938	657 (0.33)	355	17,321 (8.71)	-	1.39	(1.27, 1.52)	<0.001
	Comparator	992,036	2,410 (0.24)	255	39,311 (3.96)	53,855 (5.43)			
Per Protocol 2	COVID-19	198,938	600 (0.302)	364	12,834 (6.45)	43,010 (21.62)	1.47	(1.34, 1.61)	<0.001
	Comparator	992,036	2,134 (0.215)	248	30,810 (3.11)	225,403 (22.72)			
Other SDV									
Intent to Treat	COVID-19	198,938	606 (0.31)	327	17,325 (8.71)	-	1.38	(1.26, 1.51)	<0.001
	Comparator	992,036	2,281 (0.23)	235	42,778 (4.31)	-			
Per Protocol 1	COVID-19	198,938	606 (0.31)	327	17,325 (8.71)	-	1.35	(1.23, 1.48)	<0.001
	Comparator	992,036	2,273 (0.23)	240	39,326 (3.96)	53,874 (5.43)			
Per Protocol 2	COVID-19	198,938	537 (0.27)	326	12,835 (6.45)	43,015 (21.62)	1.39	(1.26, 1.53)	<0.001
	Comparator	992,036	2,002 (0.20)	232	30,821 (3.11)	225,431 (22.72)			

Table ST2 Footnote: Abbreviations: PY: Person Years; HR: Hazard Ratio; CI: 95% confidence interval; SDV: Other Self-Directed Violence.



**Table ST3. Cox Regression Models for Suicide Attempts & Other Self-Directed Violence: Comparing Age Subgroups**

	Age Subgroup (years)	Group	No. Persons	No. Persons with Events (%)	Rate per 100,000 PY	Rate CI	No. Persons Censored for Any Death	No. Persons Censored for Crossover	Hazard Ratio	HR CI	P-Value
Short-Term Outcomes (Days 1-30)											
Suicide Attempts											
Intent to Treat	18-45	COVID-19	39,539	54 (0.137)	1,664	(1221, 2108)	55	-	2.13	(1.55, 2.92)	<0.001
		Comparator	209,935	135 (0.064)	783	(651, 915)	48	-			
	46-59	COVID-19	44,561	27 (0.061)	740	(461, 1019)	305	-	1.98	(1.25, 3.13)	<0.001
		Comparator	195,558	60 (0.031)	374	(279, 468)	188	-			
	60-64	COVID-19	20,632	24 (0.116)	1,431	(859, 2004)	436	-	4.20	(2.46, 7.16)	<0.001
		Comparator	100,122	28 (0.028)	341	(214, 467)	215	-			
	65-74	COVID-19	53,087	13 (0.024)	307	(140, 474)	2,805	-	2.80	(1.42, 5.52)	<0.001
		Comparator	279,642	25 (0.009)	109	(66, 152)	1,146	-			
75-110	COVID-19	41,119	<11	289	(100, 478)	5,546	-	6.73	(2.51, 18.09)	<0.001	
	Comparator	206,779	<11	41	(11, 72)	2,060	-				
Per Protocol 1	18-45	COVID-19	39,539	54 (0.137)	1,664	(1221, 2108)	55	-	2.12	(1.54, 2.92)	<0.001
		Comparator	209,935	135 (0.064)	784	(652, 916)	47	761			
	46-59	COVID-19	44,561	27 (0.061)	740	(461, 1019)	305	-	1.98	(1.25, 3.12)	<0.001
		Comparator	195,558	60 (0.031)	374	(279, 469)	182	800			
	60-64	COVID-19	20,632	24 (0.116)	1,431	(859, 2004)	436	-	4.19	(2.46, 7.15)	<0.001
		Comparator	100,122	28 (0.028)	341	(215, 468)	208	382			
	65-74	COVID-19	53,087	13 (0.024)	307	(140, 474)	2,805	-	2.80	(1.42, 5.52)	<0.001
		Comparator	279,642	25 (0.009)	109	(66, 152)	1,130	862			
75-110	COVID-19	41,119	<11	289	(100, 478)	5,546	-	6.73	(2.51, 18.08)	<0.001	
	Comparator	206,779	<11	41	(11, 72)	2,016	507				
Other SDV											
Intent to Treat	18-45	COVID-19	39,539	39 (0.099)	1,202	(825, 1579)	55	-	1.82	(1.26, 2.62)	<0.001
		Comparator	209,935	114 (0.054)	661	(540, 782)	48	-			
	46-59	COVID-19	44,561	17 (0.038)	466	(244, 688)	305	-	1.41	(0.80, 2.48)	0.23
		Comparator	195,558	53 (0.027)	330	(241, 419)	188	-			
	60-64	COVID-19	20,632	12 (0.058)	715	(311, 1120)	436	-	2.94	(1.37, 6.33)	0.01
		Comparator	100,122	20 (0.020)	243	(137, 350)	215	-			
	65-74	COVID-19	53,087	<11	189	(58, 320)	2,805	-	1.35	(0.62, 2.96)	0.45
		Comparator	279,642	32 (0.011)	140	(91, 188)	1,146	-			

	75-110	COVID-19 Comparator	41,119 206,779	<11 <11	289 30	(100, 478) (4, 55)	5,546 2,060	- -	9.65	(3.25, 28.70)	<0.001
Per Protocol 1	18-45	COVID-19 Comparator	39,539 209,935	39 (0.099) 114 (0.054)	1,202 662	(825, 1579) (540, 783)	55 47	- 760	2.12	(1.54, 2.92)	<0.001
	46-59	COVID-19 Comparator	44,561 195,558	17 (0.038) 53 (0.027)	466 330	(244, 688) (241, 419)	305 182	- 800	1.98	(1.25, 3.12)	<0.001
	60-64	COVID-19 Comparator	20,632 100,122	12 (0.058) 20 (0.020)	715 244	(311, 1120) (137, 351)	436 208	- 382	4.19	(2.46, 7.15)	<0.001
	65-74	COVID-19 Comparator	53,087 279,642	<11 32 (0.011)	189 140	(58, 320) (91, 188)	2,805 1,130	- 862	2.80	(1.42, 5.52)	<0.001
	75-110	COVID-19 Comparator	41,119 206,779	<11 <11	289 24	(100, 478) (0, 47)	5,546 2,016	- 507	6.73	(2.51, 18.08)	<0.001
	Long-Term Outcomes (Days 31-365)										
	Suicide Attempts										
Intent to Treat	18-45	COVID-19 Comparator	39,539 209,935	254 (0.642) 1,069 (0.509)	704 557	(618, 791) (524, 591)	178 749	- -	1.26	(1.10, 1.45)	<0.001
	46-59	COVID-19 Comparator	44,561 195,558	151 (0.339) 523 (0.267)	375 293	(315, 434) (268, 319)	705 2,104	- -	1.28	(1.06, 1.54)	0.01
	60-64	COVID-19 Comparator	20,632 100,122	64 (0.310) 270 (0.270)	351 299	(265, 437) (263, 334)	956 2,744	- -	1.18	(0.89, 1.55)	0.25
	65-74	COVID-19 Comparator	53,087 279,642	71 (0.134) 278 (0.099)	159 111	(122, 196) (98, 124)	5,442 13,684	- -	1.43	(1.09, 1.87)	0.01
	75-110	COVID-19 Comparator	41,119 206,779	15 (0.036) 83 (0.040)	50 47	(25, 75) (37, 57)	10,066 23,613	- -	1.43	(0.61, 1.87)	0.82
	18-45	COVID-19 Comparator	39,539 209,935	254 (0.642) 1,069 (0.509)	704 572	(618, 791) (538, 607)	178 700	- 12,295	1.23	(1.07, 1.42)	<0.001
Per Protocol 1	46-59	COVID-19 Comparator	44,561 195,558	151 (0.339) 523 (0.267)	375 301	(315, 434) (275, 327)	705 1,887	- 12,693	1.25	(1.04, 1.5)	0.02
	60-64	COVID-19 Comparator	20,632 100,122	64 (0.310) 270 (0.270)	351 304	(265, 437) (267, 340)	956 2,473	- 5,856	1.16	(0.88, 1.53)	0.29
	65-74	COVID-19 Comparator	53,087 279,642	71 (0.134) 278 (0.099)	159 113	(122, 196) (99, 126)	5,442 12,472	- 14,190	1.41	(1.08, 1.84)	0.01
	75-110	COVID-19 Comparator	41,119 206,779	15 (0.036) 83 (0.040)	50 47	(25, 75) (37, 57)	10,066 21,898	- 9,164	1.06	(0.61, 1.86)	0.84
	Other SDV										
Intent to	18-45	COVID-19 Comparator	39,539 209,935	246 (0.622) 1,048 (0.499)	682 546	(597, 767) (513, 579)	175 746	- -	1.25	(1.08, 1.44)	<0.001
	46-59	COVID-19	44,561	152 (0.341)	377	(317, 437)	704	-	1.29	(1.07, 1.55)	0.01

Per Protocol 1	60-64	Comparator	195,558	522 (0.267)	293	(268, 318)	2,105	-	1.34	(0.99, 1.81)	0.05	
		COVID-19	20,632	56 (0.271)	307	(227, 388)	958	-				
	65-74	Comparator	100,122	207 (0.207)	229	(198, 260)	2,746	-	1.34	(1.01, 1.78)	0.04	
		COVID-19	53,087	60 (0.113)	134	(100, 168)	5,441	-				
	75-110	Comparator	279,642	251 (0.090)	100	(88, 113)	13,686	-	1.60	(0.97, 2.63)	0.06	
		COVID-19	41,119	20 (0.049)	66	(37, 96)	10,066	-				
	One-Year Outcomes	18-45	Comparator	206,779	74 (0.036)	42	(32, 51)	23,624	-	1.22	(1.06, 1.40)	0.01
			COVID-19	39,539	246 (0.622)	682	(597, 767)	175	-			
		46-59	Comparator	209,935	1,048 (0.499)	561	(527, 595)	697	12,256	1.26	(1.04, 1.51)	0.02
			COVID-19	44,561	152 (0.341)	377	(317, 437)	704	-			
		60-64	Comparator	195,558	522 (0.267)	301	(275, 326)	1,888	12,487	1.31	(0.97, 1.78)	0.08
			COVID-19	20,632	56 (0.271)	307	(227, 388)	958	-			
65-74		Comparator	100,122	207 (0.207)	234	(202, 266)	2,473	5,586	1.32	(0.99, 1.75)	0.06	
		COVID-19	53,087	60 (0.113)	134	(100, 168)	5,441	-				
75-110		Comparator	279,642	251 (0.090)	102	(89, 115)	12,473	12,975	1.56	(0.95, 2.57)	0.08	
		COVID-19	41,119	20 (0.049)	66	(37, 96)	10,066	-				
Suicide Attempts		18-45	Comparator	206,779	74 (0.036)	42	(33, 52)	21,908	7,446	1.34	(1.18, 1.52)	<0.001
			COVID-19	39,539	295 (0.746)	751	(666, 837)	177	-			
	46-59	Comparator	209,935	1,173 (0.559)	561	(529, 594)	747	-	1.35	(1.14, 1.61)	<0.001	
		COVID-19	44,561	174 (0.390)	396	(337, 455)	704	-				
	60-64	Comparator	195,558	568 (0.290)	292	(268, 317)	2,102	-	1.39	(1.09, 1.77)	0.01	
		COVID-19	20,632	82 (0.397)	413	(323, 502)	954	-				
	65-74	Comparator	100,122	293 (0.293)	297	(263, 331)	2,742	-	1.53	(1.19, 1.97)	<0.001	
		COVID-19	53,087	82 (0.154)	168	(131, 204)	5,439	-				
	75-110	Comparator	279,642	298 (0.107)	109	(97, 122)	13,683	-	1.57	(0.99, 2.47)	0.05	
		COVID-19	41,119	24 (0.058)	72	(43, 101)	10,063	-				
	Per Protocol 1	18-45	Comparator	206,779	89 (0.043)	46	(36, 55)	23,611	-	1.31	(1.15, 1.49)	<0.001
			COVID-19	39,539	295 (0.746)	751	(666, 837)	177	-			
46-59		Comparator	209,935	1,173 (0.559)	575	(542, 608)	698	12,240	1.33	(1.11, 1.58)	<0.001	
		COVID-19	44,561	174 (0.390)	396	(337, 455)	704	-				
60-64		Comparator	195,558	568 (0.290)	299	(275, 324)	1,885	12,473	1.37	(1.07, 1.75)	0.01	
		COVID-19	20,632	82 (0.397)	413	(323, 502)	954	-				
65-74		Comparator	100,122	293 (0.293)	302	(267, 336)	2,471	5,582	1.52	(1.18, 1.95)	<0.001	
		COVID-19	53,087	82 (0.154)	168	(131, 204)	5,439	-				
75-110		Comparator	279,642	298 (0.107)	111	(98, 123)	12,471	12,976	1.56	(0.98, 2.47)	0.06	
		COVID-19	41,119	24 (0.058)	72	(43, 101)	10,063	-				

			Comparator	206,779	89 (0.043)	46	(36, 56)	21,896	7,448		
Other SDV											
Intent to Treat	18-45	COVID-19	39,539	280 (0.708)	713	(629, 796)	175	-	1.30	(1.14, 1.49)	<0.001
		Comparator	209,935	1,144 (0.545)	547	(516, 579)	742	-			
	46-59	COVID-19	44,561	167 (0.375)	380	(322, 438)	703	-	1.32	(1.10, 1.57)	<0.001
		Comparator	195,558	560 (0.286)	288	(264, 312)	2,098	-			
	60-64	COVID-19	20,632	63 (0.305)	317	(239, 395)	957	-	1.43	(1.07, 1.90)	0.01
		Comparator	100,122	219 (0.219)	222	(193, 251)	2,735	-			
	65-74	COVID-19	53,087	68 (0.128)	139	(106, 172)	5,434	-	1.36	(1.04, 1.78)	0.02
		Comparator	279,642	279 (0.100)	102	(90, 114)	13,645	-			
	75-110	COVID-19	41,119	28 (0.068)	84	(53, 116)	10,056	-	2.07	(1.34, 3.20)	<0.001
		Comparator	206,779	79 (0.038)	41	(32, 49)	23,558	-			
Per Protocol 1	18-45	COVID-19	39,539	280 (0.708)	713	(629, 796)	175	-	1.27	(1.12, 1.45)	<0.001
		Comparator	209,935	1,144 (0.545)	561	(528, 593)	693	12,213			
	46-59	COVID-19	44,561	167 (0.375)	380	(322, 438)	703	-	1.29	(1.08, 1.54)	<0.001
		Comparator	195,558	560 (0.286)	295	(271, 320)	1,882	12,623			
	60-64	COVID-19	20,632	63 (0.305)	317	(239, 395)	957	-	1.40	(1.05, 1.86)	0.02
		Comparator	100,122	219 (0.219)	227	(197, 257)	2,464	5,826			
	65-74	COVID-19	53,087	68 (0.128)	139	(106, 172)	5,434	-	1.34	(1.02, 1.75)	0.03
		Comparator	279,642	279 (0.100)	104	(92, 116)	12,437	14,101			
	75-110	COVID-19	41,119	28 (0.068)	84	(53, 116)	10,056	-	2.06	(1.33, 3.18)	<0.001
		Comparator	206,779	79 (0.038)	41	(32, 50)	21,850	9,111			

Table ST3 Footnote: Abbreviations: PY: Person Years; CI: 95% confidence interval; HR: Hazard Ratio; SDV: Other Self-Directed Violence

**Table ST4. Cox Regression Models for Suicide Attempts & Other Self-Directed Violence: Comparing Sex Subgroups**

Subgroup		Group	No. Persons	No. Persons with Events (%)	Rate per 100,000 PY	Rate CI	No. Persons Censored for Any Death	No. Persons Censored for Crossover	Hazard Ratio	HR CI	P-Value
Short-Term Outcomes (Days 1-30)											
Suicide Attempts											
Intent to Treat	Female	COVID-19	20,962	17 (0.081)	992	(520, 1464)	185	-	1.57	(0.91, 2.72)	0.11
		Comparator	104,294	55 (0.053)	642	(472, 812)	89	-			
	Male	COVID-19	177,976	110 (0.062)	774	(630, 919)	8,962	-	2.84	(2.25, 3.59)	<0.001
		Comparator	887,742	200 (0.023)	275	(237, 313)	3,568	-			
Per Protocol 1	Female	COVID-19	20,962	17 (0.081)	992	(520, 1464)	185	-	1.57	(0.91, 2.72)	0.11
		Comparator	104,294	55 (0.053)	643	(473, 813)	87	403			
	Male	COVID-19	177,976	110 (0.062)	774	(630, 919)	8,962	-	2.84	(2.24, 3.59)	<0.001
		Comparator	887,742	200 (0.023)	275	(237, 313)	3,496	2,909			
Per Protocol	Female	COVID-19	20,962	17 (0.081)	999	(524, 1474)	129	400	1.57	(0.91, 2.72)	0.11
		Comparator	104,294	55 (0.053)	647	(476, 818)	66	1,989			
	Male	COVID-19	177,976	110 (0.062)	772	(627, 917)	6,662	2,806	2.81	(2.22, 3.56)	<0.001
		Comparator	887,742	200 (0.023)	277	(238, 315)	2,666	14,903			
Other SDV											
Intent to Treat	Female	COVID-19	20,962	18 (0.086)	1,050	(565, 1536)	185	-	1.84	(1.07, 3.15)	0.03
		Comparator	104,294	50 (0.048)	584	(422, 745)	89	-			
	Male	COVID-19	177,976	67 (0.038)	472	(359, 585)	8,962	-	1.98	(1.49, 2.63)	<0.001
		Comparator	887,742	174 (0.020)	239	(203, 274)	3,568	-			
Per Protocol	Female	COVID-19	20,962	18 (0.086)	1,050	(565, 1536)	185	-	1.83	(1.07, 3.14)	0.03
		Comparator	104,294	50 (0.048)	585	(423, 747)	89	402			
	Male	COVID-19	177,976	67 (0.038)	472	(359, 585)	8,962	-	1.99	(1.50, 2.64)	<0.001
		Comparator	887,742	174 (0.020)	238	(202, 273)	3,562	2,909			
Per Protocol	Female	COVID-19	20,962	18 (0.086)	1,058	(569, 1547)	129	400	1.88	(1.09, 3.22)	0.02
		Comparator	104,294	50 (0.048)	576	(415, 737)	66	1,990			
	Male	COVID-19	177,976	67 (0.038)	475	(361, 588)	6,661	2,806	1.98	(1.49, 2.63)	<0.001
		Comparator	887,742	174 (0.020)	241	(205, 276)	2,666	14,907			
Long-Term Outcomes (Days 31 -365)											
Suicide Attempts											

Intent to Treat	Female	COVID-19	20,962	94 (0.448)	497	(397, 598)	403	-	1.31	(1.04, 1.65)	0.02
		Comparator	104,294	366 (0.351)	385	(346, 425)	1,064	-			
	Male	COVID-19	177,976	461 (0.259)	306	(279, 334)	16,944	-	1.30	(1.18, 1.45)	<0.001
		Comparator	887,742	1,857 (0.209)	234	(223, 245)	41,830	-			
Per Protocol	Female	COVID-19	20,962	94 (0.448)	497	(397, 598)	403	-	1.28	(1.02, 1.61)	0.03
		Comparator	104,294	366 (0.351)	394	(354, 435)	965	6,345			
	Male	COVID-19	177,976	461 (0.259)	306	(279, 334)	16,944	-	1.28	(1.15, 1.42)	<0.001
		Comparator	887,742	1,857 (0.209)	239	(228, 250)	38,465	44,383			
Per Protocol	Female	COVID-19	20,962	94 (0.448)	499	(391, 607)	289	5,476	1.35	(1.05, 1.72)	0.02
		Comparator	104,294	366 (0.351)	377	(335, 418)	710	27,597			
	Male	COVID-19	177,976	461 (0.259)	312	(282, 342)	12,551	37,561	1.34	(1.20, 1.50)	<0.001
		Comparator	887,742	1,857 (0.209)	232	(220, 243)	30,108	197,861			
Other SDV											
Intent to Treat	Female	COVID-19	20,962	87 (0.415)	460	(363, 556)	401	-	1.13	(0.90, 1.44)	0.29
		Comparator	104,294	390 (0.374)	411	(370, 451)	1,064	-			
	Male	COVID-19	177,976	447 (0.251)	297	(270, 325)	16,943	-	1.36	(1.22, 1.51)	<0.001
		Comparator	887,742	1,712 (0.193)	216	(206, 226)	41,843	-			
Per Protocol	Female	COVID-19	20,962	87 (0.415)	460	(363, 556)	401	-	1.11	(0.87, 1.40)	0.40
		Comparator	104,294	390 (0.374)	420	(378, 462)	1,064	6,337			
	Male	COVID-19	177,976	447 (0.251)	297	(270, 325)	16,943	-	1.33	(1.20, 1.48)	<0.001
		Comparator	887,742	1,712 (0.193)	221	(210, 231)	41,845	44,413			
Per Protocol	Female	COVID-19	20,962	87 (0.415)	438	(337, 539)	288	5,477	1.08	(0.84, 1.40)	0.55
		Comparator	104,294	390 (0.374)	411	(367, 454)	709	27,582			
	Male	COVID-19	177,976	447 (0.251)	297	(267, 326)	12,550	37,555	1.39	(1.24, 1.55)	<0.001
		Comparator	887,742	1,712 (0.193)	211	(200, 222)	30,114	197,908			
One-Year Outcomes (Days 1-365)											
Suicide Attempts											
Intent to Treat	Female	COVID-19	20,962	109 (0.520)	529	(430, 628)	403	-	1.37	(1.11, 1.70)	<0.001
		Comparator	104,294	404 (0.387)	390	(352, 428)	1,062	-			
	Male	COVID-19	177,976	548 (0.308)	333	(305, 361)	16,918	-	1.43	(1.30, 1.57)	<0.001
		Comparator	887,742	2,017 (0.227)	233	(223, 243)	41,698	-			
Per Protocol	Female	COVID-19	20,962	109 (0.520)	529	(430, 628)	403	-	1.35	(1.09, 1.67)	0.01
		Comparator	104,294	404 (0.387)	399	(360, 438)	963	6,298			
	Male	COVID-19	177,976	548 (0.308)	333	(305, 361)	16,918	-	1.40	(1.28, 1.54)	<0.001
		Comparator	887,742	2,017 (0.227)	237	(227, 248)	38,348	44,087			
Pe r	Female	COVID-19	20,962	109 (0.520)	535	(429, 642)	289	5,475	1.41	(1.12, 1.76)	<0.001
		Comparator	104,294	404 (0.387)	385	(345, 426)	709	27,585			

	Male	COVID-19	177,976	548 (0.308)	343	(313, 373)	12,545	37,535	1.48	(1.34, 1.64)	<0.001
		Comparator	887,742	2,017 (0.227)	231	(221, 242)	30,101	197,818			
Other SDV											
Intent to Treat	Female	COVID-19	20,962	102 (0.487)	495	(399, 591)	401	-	1.21	(0.97, 1.50)	0.09
		Comparator	104,294	430 (0.412)	415	(376, 455)	1,063	-			
	Male	COVID-19	177,976	504 (0.283)	306	(280, 333)	16,924	-	1.42	(1.28, 1.57)	<0.001
		Comparator	887,742	1,851 (0.209)	214	(204, 224)	41,715	-			
Per Protocol	Female	COVID-19	20,962	102 (0.487)	495	(399, 591)	401	-	1.18	(0.95, 1.47)	0.14
		Comparator	104,294	430 (0.412)	424	(384, 465)	1,063	6,288			
	Male	COVID-19	177,976	504 (0.283)	306	(280, 333)	16,924	-	1.39	(1.26, 1.54)	<0.001
		Comparator	887,742	1,851 (0.209)	218	(208, 228)	41,733	44,116			
Per Protocol	Female	COVID-19	20,962	102 (0.487)	480	(379, 580)	288	5,474	1.16	(0.92, 1.47)	0.21
		Comparator	104,294	430 (0.412)	418	(376, 460)	708	27,565			
	Male	COVID-19	177,976	504 (0.283)	307	(279, 335)	12,547	37,541	1.45	(1.30, 1.61)	<0.001
		Comparator	887,742	1,851 (0.209)	210	(200, 221)	30,113	197,866			

Table ST4 Footnote: Abbreviations: PY: Person Years; CI: 95% confidence interval; HR: Hazard Ratio; SDV: Other Self-Directed Violence

**Table ST5. Cox Regression Models for Suicide Attempts & Other Self-Directed Violence: Comparing Combined Prior Suicide Attempt or Other SDV Events in Two Years Prior to Index**

	Subgroup	Group	No. Persons	No. Persons with Events (%)	Rate per 100,00 PY	Rate CI	No. Persons Censored for Any Death	No. Persons Censored for Crossover	Hazard Ratio	HR CI	P-Value
Short-Term Outcomes (Days 1-30)											
Suicide Attempts											
Intent to Treat	SA /SDV Before Index	COVID-19	2,396	54 (2.254)	28,055	(20,572, 35,538)	32	-	2.47	(1.77, 3.44)	<0.001
		Comparator	11,015	102 (0.926)	11,341	(9,140, 13,542)	39	-			
	No SA /SDV Before Index	COVID-19	196,542	73 (0.037)	464	(358, 571)	9,115	-	2.43	(1.84, 3.22)	<0.001
		Comparator	981,021	153 (0.016)	190	(160, 220)	3,618	-			
Per Protocol 1	SA /SDV Before Index	COVID-19	2,396	21 (0.876)	28,055	(20,572, 35,538)	32	-	2.47	(1.77, 3.43)	<0.001
		Comparator	11,015	66 (0.599)	11,362	(9,157, 13,566)	39	40			
	No SA /SDV Before Index	COVID-19	196,542	64 (0.033)	464	(358, 571)	9,115	-	2.43	(1.83, 3.21)	<0.001
		Comparator	981,021	157 (0.016)	190	(160, 221)	3,544	3,584			
Other SDV											
Intent to Treat	SA /SDV Before Index	COVID-19	2,396	21 (0.876)	939	(537, 1,340)	32	-	1.48	(0.90, 2.42)	0.12
		Comparator	11,015	66 (0.599)	629	(477, 781)	39	-			
	No SA /SDV Before Index	COVID-19	196,542	64 (0.033)	35	(26, 44)	9,115	-	2.07	(1.54, 2.78)	<0.001
		Comparator	981,021	158 (0.016)	16	(14, 19)	3,618	-			
Per Protocol 1	SA /SDV Before Index	COVID-19	2,396	21 (0.876)	939	(537, 1,340)	32	-	1.47	(0.90, 2.42)	0.12
		Comparator	11,015	66 (0.599)	649	(493, 806)	39	41			
	No SA /SDV Before Index	COVID-19	196,542	64 (0.033)	35	(26, 44)	9,115	-	2.08	(1.55, 2.8)	<0.001
		Comparator	981,021	157 (0.016)	17	(14, 19)	3,544	3,589			
Long-Term Outcomes (Days 31-365)											
Suicide Attempts											



Intent to Treat	SA /SDV Before Index	COVID-19	2,396	163 (6.803)	7,967	(6,744, 9,190)	97	-	1.29	(1.08, 1.54)	<0.001
		Comparator	11,015	593 (5.384)	6,155	(5,660, 6,651)	306	-			
	No SA /SDV Before Index	COVID-19	196,542	392 (0.199)	234	(211, 258)	17,250	-	1.26	(1.13, 1.41)	<0.001
		Comparator	981,021	1,630 (0.166)	186	(177, 195)	42,588	-			
Per Protocol 1	SA /SDV Before Index	COVID-19	2,396	163 (6.803)	7,967	(6,744, 9,190)	97	-	1.26	(1.05, 1.50)	0.01
		Comparator	11,015	592 (5.374)	6,363	(5,850, 6,875)	306	785			
	No SA /SDV Before Index	COVID-19	196,542	392 (0.199)	234	(211, 258)	17,250	-	1.24	(1.11, 1.39)	<0.001
		Comparator	981,021	1,620 (0.165)	189	(180, 198)	42,594	53,494			
Other SDV											
Intent to Treat	SA /SDV Before Index	COVID-19	2,396	157 (6.553)	7,018	(5,920, 8,116)	95	-	1.24	(1.04, 1.48)	0.02
		Comparator	11,015	592 (5.374)	5,641	(5,186, 6,095)	311	-			
	No SA /SDV Before Index	COVID-19	196,542	377 (0.192)	206	(185, 227)	17,249	-	1.31	(1.17, 1.47)	<0.001
		Comparator	981,021	1,510 (0.154)	157	(150, 165)	42,596	-			
Per Protocol 1	SA /SDV Before Index	COVID-19	2,396	157 (6.553)	7,018	(5,920, 8,116)	95	-	1.21	(1.01, 1.44)	0.04
		Comparator	11,015	591 (5.3765)	5,814	(5,346, 6,283)	311	798			
	No SA /SDV Before Index	COVID-19	196,542	377 (0.192)	206	(185, 227)	17,249	-	1.28	(1.15, 1.44)	<0.001
		Comparator	981,021	1,504 (0.153)	161	(152, 169)	42,598	53,512			
One-Year Outcomes											
Suicide Attempts											
Intent to Treat	SA /SDV Before Index	COVID-19	2,396	202 (8.431)	9,188	(7,921, 10,455)	95	-	1.46	(1.24, 1.71)	<0.001
		Comparator	11,015	658 (5.974)	6,288	(5,807, 6,768)	301	-			
	No SA /SDV Before Index	COVID-19	196,542	455 (0.232)	249	(226, 272)	17,242	-	1.35	(1.22, 1.50)	<0.001
		Comparator	981,021	1,763 (0.180)	184	(175, 192)	42,584	-			
Per Protocol 1	SA /SDV Before Index	COVID-19	2,396	171 (7.137)	9,188	(7,921, 10,455)	95	-	1.42	(1.21, 1.68)	<0.001
		Comparator	11,015	636 (5.774)	6,482	(5,986, 6,977)	282	785			
	No SA /SDV Before Index	COVID-19	196,542	435 (0.221)	249	(226, 272)	17,242	-	1.33	(1.20, 1.48)	<0.001
		Comparator	981,021	1,637 (0.167)	187	(178, 196)	39,049	53,494			
Other SDV											

Intent to Treat	SA /SDV Before Index	COVID-19	2,396	171 (7.137)	7,644	(6,498, 8,789)	95	-	1.26	(1.06, 1.49)	0.01
		Comparator	11,015	637 (5.783)	6,070	(5,598, 6,541)	310	-			
	No SA /SDV Before Index	COVID-19	196,542	435 (0.221)	238	(215, 260)	17,246	-	1.39	(1.25, 1.54)	<0.001
		Comparator	981,021	1,644 (0.168)	171	(163, 180)	42,594	-			
Per Protocol <sup>1</sup>	SA /SDV Before Index	COVID-19	2,396	171 (7.137)	7,644	(6,498, 8,789)	95	-	1.23	(1.03, 1.46)	0.02
		Comparator	11,015	636 (5.774)	6,257	(5,771, 6,743)	291	794			
	No SA /SDV Before Index	COVID-19	196,542	435 (0.221)	238	(215, 260)	17,246	-	1.36	(1.22, 1.52)	<0.001
		Comparator	981,021	1,637 (0.167)	175	(166, 183)	39,056	53,504			

Table ST5 Footnote: One or more events (suicide attempt or other self-directed violence) in the two years prior to index date; Abbreviations: PY: Person Years; CI: 95% confidence interval; HR: Hazard Ratio; SA: Suicide Attempt; SDV: Other Self-Directed Violence

**Table ST6. Cox Regression Models for Suicide Attempts & Other Self-Directed Violence: Comparing Mental Health Visits in Two Years Prior to Index**

Subgroup		Group	No. Persons	No. Persons with Events (%)	Rate per 100,000 PY	Rate CI	No. Persons Censored for Any Death	No. Persons Censored for Crossover	Hazard Ratio	HR CI	P-Value
Short-Term Outcomes (Days 1-30)											
Suicide Attempts											
Intent to Treat	MH Visit Before Index	COVID-19	121,309	118 (0.097)	1,213	(994, 1,432)	5,168	-	2.38	(1.91, 2.96)	<0.001
		Comparator	592,437	247 (0.042)	508	(445, 572)	2,245	-			
	No MH Visit Before Index	COVID-19	77,629	<11	145	(50, 240)	3,979	-	5.91	(2.15, 16.27)	<0.001
		Comparator	399,599	<11	24	(7, 41)	1,412	-			
Per Protocol 1	MH Visit Before Index	COVID-19	121,309	118 (0.097)	1,213	(994, 1,432)	5,168	-	2.38	(1.91, 2.96)	<0.001
		Comparator	592,437	247 (0.042)	509	(446, 573)	2,207	2,498			
	No MH Visit Before Index	COVID-19	77,629	<11	145	(50, 240)	3,979	-	5.91	(2.14, 16.26)	<0.001
		Comparator	399,599	<11	24	(8, 41)	1,376	1,132			
Other SDV											
Intent to Treat	MH Visit Before Index	COVID-19	121,309	76 (0.063)	67	(52, 82)	5,167	-	1.76	(1.35, 2.30)	<0.001
		Comparator	592,437	215 (0.036)	37	(32, 42)	2,245	-			
	No MH Visit Before Index	COVID-19	77,629	<11	13	(4, 21)	3,980	-	5.27	(1.82, 15.28)	<0.001
		Comparator	399,599	<11	2	(1, 4)	1,412	-			
Per Protocol 1	MH Visit Before Index	COVID-19	121,309	76 (0.063)	67	(52, 82)	5,167	-	1.77	(1.36, 2.31)	<0.001
		Comparator	592,437	214 (0.036)	38	(33, 43)	2,207	2,498			
	No MH Visit Before Index	COVID-19	77,629	<11	13	(4, 21)	3,980	-	5.27	(1.82, 15.27)	<0.001
		Comparator	399,599	<11	2	(1, 4)	1,376	1,132			
Long-Term Outcomes (Days 31-365)											
Suicide Attempts											
Int en	MH Visit Before Index	COVID-19	121,309	523 (0.431)	505	(462, 548)	10,197	-	1.30	(1.18, 1.43)	<0.001

		Comparator	592,437	2,059 (0.348)	388	(372, 405)	25,065	-			
	No MH Visit Before Index	COVID-19	77,629	32 (0.041)	49	(32, 66)	7,150	-	1.06	(0.72, 1.56)	0.76
		Comparator	399,599	164 (0.041)	46	(39, 53)	17,829	-			
Per Protocol 1	MH Visit Before Index	COVID-19	121,309	523 (0.431)	505	(462, 548)	10,197	-	1.27	(1.15, 1.40)	<0.001
		Comparator	592,437	2,049 (0.346)	398	(381, 415)	25,070	37,319			
	No MH Visit Before Index	COVID-19	77,629	32 (0.041)	49	(32, 66)	7,150	-	1.05	(0.71, 1.54)	0.81
		Comparator	399,599	163 (0.041)	46	(39, 54)	17,830	16,969			
Other SDV											
Intent to Treat	MH Visit Before Index	COVID-19	121,309	497 (0.410)	439	(400, 477)	10,194	-	1.29	(1.16, 1.42)	<0.001
		Comparator	592,437	1,978 (0.334)	342	(327, 357)	25,078	-			
	No MH Visit Before Index	COVID-19	77,629	37 (0.048)	51	(35, 68)	7,150	-	1.62	(1.12, 2.35)	0.01
		Comparator	399,599	124 (0.031)	32	(26, 37)	17,829	-			
Per Protocol 1	MH Visit Before Index	COVID-19	121,309	497 (0.410)	439	(400, 477)	10,194	-	1.25	(1.14, 1.39)	<0.001
		Comparator	592,437	1,972 (0.333)	350	(335, 366)	25,079	37,342			
	No MH Visit Before Index	COVID-19	77,629	37 (0.048)	51	(35, 68)	7,150	-	1.60	(1.11, 2.32)	0.01
		Comparator	399,599	123 (0.033)	32	(26, 38)	17,830	16,968			
One-Year Outcomes											
Suicide Attempts											
Intent to Treat	MH Visit Before Index	COVID-19	121,309	617 (0.509)	545	(502, 588)	10,189	-	1.40	(1.28, 1.53)	<0.001
		Comparator	592,437	2,249 (0.380)	389	(373, 405)	25,056	-			
	No MH Visit Before Index	COVID-19	77,629	40 (0.052)	56	(38, 73)	7,148	-	1.26	(0.89, 1.79)	0.19
		Comparator	399,599	172 (0.043)	44	(37, 51)	17,829	-			
Per Protocol 1	MH Visit Before Index	COVID-19	121,309	617 (0.509)	545	(502, 588)	10,189	-	1.37	(1.25, 1.50)	<0.001
		Comparator	592,437	2,239 (0.378)	398	(381, 414)	22,818	37,310			
	No MH Visit Before Index	COVID-19	77,629	40 (0.052)	56	(38, 73)	7,148	-	1.25	(0.88, 1.77)	0.22
		Comparator	399,599	171 (0.043)	45	(38, 51)	16,513	16,969			
Other SDV											

Intent to Treat	MH Visit Before Index	COVID-19	121,309	562 (0.463)	496	(455, 537)	10,193	-	1.34	(1.22, 1.47)	<0.001
		Comparator	592,437	2,148 (0.363)	371	(356, 387)	25,075	-			
	No MH Visit Before Index	COVID-19	77,629	44 (0.057)	61	(43, 79)	7,148	-	1.79	(1.27, 2.53)	<0.001
		Comparator	399,599	133 (0.033)	34	(28, 40)	17,829	-			
Per Protocol <sup>1</sup>	MH Visit Before Index	COVID-19	121,309	562 (0.463)	496	(455, 537)	10,193	-	1.31	(1.19, 1.44)	<0.001
		Comparator	592,437	2,141 (0.361)	380	(364, 396)	22,834	37,330			
	No MH Visit Before Index	COVID-19	77,629	44 (0.057)	61	(43, 79)	7,148	-	1.78	(1.26, 2.51)	<0.001
		Comparator	399,599	132 (0.033)	34	(29, 40)	16,513	16,968			

Table ST6 Footnote: One or more mental health visits in the two years prior to index date; Abbreviations: PY: Person Years; CI: 95% confidence interval; HR: Hazard Ratio; MH: mental health; SDV: Other Self-Directed Violence

**Table ST7. Cox Regression for Suicide Attempts & Other Self-Directed Violence Comparing Race**

Subgroup		Group	No. Persons	No. Persons with Events (%)	Rate per 100,000 PY	Rate CI	No. Persons Censored for Any Death	No. Persons Censored for Crossover	Hazard Ratio	HR CI	P-Value
Short-Term Outcomes (Days 1-30)											
Suicide Attempts											
Intent to Treat	Black	COVID-19	46,177	25 (0.054)	674	(410, 938)	1,813	-	2.19	(1.37, 3.51)	<0.001
		Comparator	230,866	58 (0.025)	306	(227, 385)	684	-			
	Other/Missing	COVID-19	16,322	13 (0.080)	987	(451, 1,524)	530	-	2.25	(1.14, 4.43)	0.02
		Comparator	77,893	28 (0.036)	438	(276, 600)	155	-			
	White	COVID-19	136,439	89 (0.065)	817	(648, 987)	6,804	-	2.70	(2.08, 3.49)	<0.001
		Comparator	683,277	169 (0.025)	302	(256, 347)	2,818	-			
Per Protocol 1	Black	COVID-19	46,177	25 (0.054)	674	(410, 938)	1,813	-	2.19	(1.37, 3.50)	<0.001
		Comparator	230,866	58 (0.025)	307	(228, 385)	669	871			
	Other/Missing	COVID-19	16,322	13 (0.080)	987	(451, 1,524)	530	-	2.24	(1.14, 4.43)	0.02
		Comparator	77,893	28 (0.036)	439	(276, 601)	151	313			
	White	COVID-19	136,439	89 (0.065)	817	(648, 987)	6,804	-	2.69	(2.08, 3.49)	<0.001
		Comparator	683,277	169 (0.025)	302	(256, 348)	2,763	2,446			
Other SDV											
Intent to Treat	Black	COVID-19	46,177	21 (0.045)	48	(28, 69)	1,812	-	1.82	(1.10, 3.00)	0.02
		Comparator	230,866	59 (0.026)	26	(19, 33)	684	-			
	Other/Missing	COVID-19	16,322	<11	13	(-5, 31)	531	-	0.46	(0.11, 1.97)	0.30
		Comparator	77,893	21 (0.027)	27	(16, 39)	155	-			
	White	COVID-19	136,439	62 (0.045)	49	(37, 61)	6,804	-	2.21	(1.63, 3.00)	<0.001
		Comparator	683,277	144 (0.021)	22	(18, 25)	2,818	-			
Per Protocol 1	Black	COVID-19	46,177	21 (0.045)	48	(28, 69)	1,812	-	1.81	(1.10, 3.00)	0.02
		Comparator	230,866	59 (0.026)	27	(20, 34)	669	871			
	Other/Missing	COVID-19	16,322	<11	13	(-5, 31)	531	-	0.46	(0.11, 1.97)	0.30
		Comparator	77,893	21 (0.027)	28	(16, 40)	151	313			
	White	COVID-19	136,439	62 (0.045)	49	(37, 61)	6,804	-	2.22	(1.64, 3.02)	<0.001
		Comparator	683,277	143 (0.021)	22	(18, 26)	2,763	2,446			
Long-Term Outcomes (Days 31-365)											
Suicide Attempts											

Intent to Treat	Black	COVID-19	46,177	163 (0.353)	411	(348, 474)	3,481	-	1.53	(1.28, 1.83)	<0.001
		Comparator	230,866	557 (0.241)	268	(246, 291)	7,894	-			
	Other/Missing	COVID-19	16,322	66 (0.404)	464	(352, 576)	913	-	1.43	(1.08, 1.90)	0.01
		Comparator	77,893	228 (0.293)	324	(282, 366)	2,037	-			
	White	COVID-19	136,439	326 (0.239)	283	(252, 313)	12,953	-	1.20	(1.06, 1.35)	<0.001
		Comparator	683,277	1,438 (0.210)	236	(224, 248)	32,963	-			
Per Protocol 1	Black	COVID-19	46,177	163 (0.353)	411	(348, 474)	3,481	-	1.50	(1.26, 1.79)	<0.001
		Comparator	230,866	554 (0.240)	274	(251, 297)	7,896	13,210			
	Other/Missing	COVID-19	16,322	66 (0.404)	464	(352, 576)	913	-	1.41	(1.06, 1.87)	0.02
		Comparator	77,893	226 (0.290)	330	(287, 373)	2,038	4,451			
	White	COVID-19	136,439	326 (0.239)	283	(252, 313)	12,953	-	1.18	(1.04, 1.33)	0.01
		Comparator	683,277	1,432 (0.210)	241	(228, 253)	32,966	36,627			
Other SDV											
Intent to Treat	Black	COVID-19	46,177	108 (0.234)	249	(202, 296)	3,478	-	1.15	(0.94, 1.43)	0.18
		Comparator	230,866	489 (0.212)	216	(197, 235)	7,894	-			
	Other/Missing	COVID-19	16,322	58 (0.355)	373	(277, 469)	913	-	1.29	(0.96, 1.72)	0.09
		Comparator	77,893	223 (0.286)	290	(252, 329)	2,041	-			
	White	COVID-19	136,439	368 (0.270)	292	(262, 321)	12,953	-	1.40	(1.25, 1.57)	<0.001
		Comparator	683,277	1,390 (0.203)	209	(198, 220)	32,972	-			
Per Protocol 1	Black	COVID-19	46,177	108 (0.234)	249	(202, 296)	3,478	-	1.13	(0.91, 1.39)	0.26
		Comparator	230,866	448 (0.211)	221	(201, 240)	7,894	13,221			
	Other/Missing	COVID-19	16,322	85 (0.355)	373	(277, 469)	913	-	1.26	(0.94, 1.69)	0.12
		Comparator	77,893	222 (0.285)	296	(257, 335)	2,041	4,444			
	White	COVID-19	136,439	368 (0.270)	292	(262, 321)	12,953	-	1.37	(1.22, 1.54)	<0.001
		Comparator	683,277	1,385 (0.203)	213	(202, 224)	32,974	36,645			
One-Year Outcomes											
Suicide Attempts											
Intent to Treat	Black	COVID-19	46,177	185 (0.401)	426	(365, 488)	3,479	-	1.60	(1.36, 1.89)	<0.001
		Comparator	230,866	602 (0.261)	266	(244, 287)	7,893	-			
	Other/Missing	COVID-19	16,322	76 (0.466)	489	(379, 599)	911	-	1.52	(1.17, 1.98)	<0.001
		Comparator	77,893	247 (0.317)	322	(282, 362)	2,037	-			
	White	COVID-19	136,439	396 (0.290)	314	(283, 345)	12,947	-	1.33	(1.19, 1.48)	<0.001
		Comparator	683,277	1,572 (0.230)	236	(224, 248)	32,955	-			
Per Protocol	Black	COVID-19	46,177	185 (0.401)	426	(365, 488)	3,479	-	1.57	(1.33, 1.86)	<0.001
		Comparator	230,866	599 (0.259)	271	(249, 293)	7,206	13,208			
	Other/Missing	COVID-19	16,322	76 (0.466)	489	(379, 599)	911	-	1.50	(1.15, 1.95)	<0.001
		Comparator	77,893	245 (0.315)	327	(286, 368)	1,823	4,450			

	White	COVID-19	136,439	396 (0.290)	314	(283, 345)	12,947	-	1.31	(1.17, 1.46)	<0.001
		Comparator	683,277	1,566 (0.229)	241	(229, 253)	30,302	36,621			
Other SDV											
Intent to Treat	Black	COVID-19	46,177	127 (0.275)	292	(242, 343)	3,477	-	1.23	(1.01, 1.49)	0.04
		Comparator	230,866	539 (0.233)	238	(218, 258)	7,894	-			
	Other/Missing	COVID-19	16,322	60 (0.368)	386	(288, 483)	913	-	1.22	(0.92, 1.62)	0.17
		Comparator	77,893	243 (0.312)	316	(277, 356)	2,041	-			
Per Protocol 1	White	COVID-19	136,439	419 (0.307)	332	(300, 364)	12,951	-	1.47	(1.32, 1.65)	<0.001
		Comparator	683,277	1,499 (0.219)	225	(214, 236)	32,969	-			
	Black	COVID-19	46,177	127 (0.275)	292	(242, 343)	3,477	-	1.20	(0.99, 1.46)	0.06
		Comparator	230,866	538 (0.233)	244	(223, 264)	7,205	13,218			
	Other/Missing	COVID-19	16,322	60 (0.368)	386	(288, 483)	913	-	1.20	(0.90, 1.59)	0.22
		Comparator	77,893	242 (0.311)	323	(282, 364)	1,826	4,443			
	White	COVID-19	136,439	419 (0.307)	332	(300, 364)	12,951	-	1.45	(1.30, 1.62)	<0.001
		Comparator	683,277	1,493 (0.219)	229	(218, 241)	30,316	36,637			

Table ST7 Footnote: The Other/Missing race subgroup includes people who identified as American Indian/Alaska Native, Asian, Native Hawaiian/ other Pacific Islander, Native Hawaiian/Other Pacific Islander, more than one race, or their race was missing. Abbreviations: PY: Person Years; CI: 95% confidence interval; HR: Hazard Ratio; SDV: Other Self-Directed Violence



**Table ST8. Cox Regression Models for Suicide Attempts & Other Self-Directed Violence: Comparing Ethnicity**

Subgroup		Group	No. Persons	No. Persons with Events (%)	Rate per 100,000 PY	Rate CI	No. Persons Censored for Any Death	No. Persons Censored for Crossover	Hazard Ratio	HR CI	P-Value
Short-Term Outcomes (Days 1-30)											
Suicide Attempts											
Intent to Treat	Hispanic	COVID-19	19,770	13 (0.066)	815	(372, 1,257)	657	-	1.65	(0.87, 3.12)	0.12
		Comparator	96,476	39 (0.040)	493	(338, 647)	229	-			
	Non-Hispanic	COVID-19	179,168	114 (0.064)	796	(650, 942)	8,490	-	2.69	(2.15, 3.39)	<0.001
		Comparator	895,560	216 (0.024)	294	(255, 333)	3,428	-			
Per Protocol	Hispanic	COVID-19	19,770	13 (0.066)	815	(372, 1,257)	657	-	1.65	(0.87, 3.11)	0.12
		Comparator	96,476	39 (0.040)	493	(339, 648)	219	464			
	Non-Hispanic	COVID-19	179,168	114 (0.064)	796	(650, 942)	8,490	-	2.69	(2.14, 3.38)	<0.001
		Comparator	895,560	216 (0.024)	294	(255, 334)	3,364	3,166			
Other SDV											
Intent to Treat	Hispanic	COVID-19	19,770	12 (0.061)	64	(28, 100)	658	-	2.29	(1.16, 4.53)	0.02
		Comparator	96,476	26 (0.027)	27	(17, 38)	229	-			
	Non-Hispanic	COVID-19	179,168	73 (0.041)	44	(34, 54)	8,489	-	1.89	(1.44, 2.48)	<0.001
		Comparator	895,560	198 (0.022)	23	(19, 26)	3,428	-			
Per Protocol	Hispanic	COVID-19	19,770	12 (0.061)	64	(28, 100)	658	-	2.29	(1.16, 4.52)	0.02
		Comparator	96,476	26 (0.027)	28	(17, 39)	219	464			
	Non-Hispanic	COVID-19	179,168	73 (0.041)	44	(34, 54)	8,489	-	1.89	(1.44, 2.49)	<0.001
		Comparator	895,560	197 (0.022)	23	(20, 26)	3,364	3,166			
Long-Term Outcomes (Days 31-365)											
Suicide Attempts											
Intent to Treat	Hispanic	COVID-19	19,770	71 (0.359)	412	(316, 508)	1,105	-	1.17	(0.90, 1.53)	0.23
		Comparator	96,476	306 (0.317)	351	(312, 390)	2,339	-			
	Non-Hispanic	COVID-19	179,168	484 (0.270)	318	(290, 347)	16,242	-	1.33	(1.20, 1.47)	<0.001
		Comparator	895,560	1,917 (0.214)	239	(229, 250)	40,555	-			
Per Protocol	Hispanic	COVID-19	19,770	71 (0.359)	412	(316, 508)	1,105	-	1.14	(0.87, 1.48)	0.33
		Comparator	96,476	306 (0.317)	362	(322, 403)	2,339	6,302			
	Non-Hispanic	COVID-19	179,168	484 (0.270)	318	(290, 347)	16,242	-	1.31	(1.18, 1.45)	<0.001
		Comparator	895,560	1,906 (0.213)	244	(233, 255)	40,561	47,986			

Other SDV											
Intent to Treat	Hispanic	COVID-19	19,770	78 (0.395)	414	(322, 506)	11,06	-	1.50	(1.16, 1.93)	<0.001
		Comparator	96,476	264 (0.274)	278	(244, 311)	2,345	-			
	Non-Hispanic	COVID-19	179,168	456 (0.255)	274	(249, 299)	16,238	-	1.31	(1.18, 1.45)	<0.001
		Comparator	895,560	1,838 (0.205)	210	(201, 220)	40,562	-			
Per Protocol	Hispanic	COVID-19	19,770	78 (0.395)	414	(322, 506)	1106	-	1.45	(1.13, 1.87)	<0.001
		Comparator	96,476	264 (0.274)	286	(251, 320)	2,345	6,294			
	Non-Hispanic	COVID-19	179,168	456 (0.255)	274	(249, 299)	16,238	-	1.28	(1.15, 1.42)	<0.001
		Comparator	895,560	1,831 (0.204)	214	(205, 224)	40,564	48,016			
One-Year Outcomes											
Suicide Attempts											
Intent to Treat	Hispanic	COVID-19	19,770	82 (0.415)	436	(341, 530)	1,103	-	1.22	(0.96, 1.57)	0.11
		Comparator	96,476	338 (0.350)	355	(318, 393)	2,339	-			
	Non-Hispanic	COVID-19	179,168	575 (0.321)	346	(317, 374)	16,234	-	1.45	(1.32, 1.59)	<0.001
		Comparator	895,560	2,083 (0.233)	238	(228, 249)	40,546	-			
Per Protocol	Hispanic	COVID-19	19,770	82 (0.415)	436	(341, 530)	1,103	-	1.19	(0.93, 1.53)	0.16
		Comparator	96,476	338 (0.350)	366	(327, 405)	2,039	6,299			
	Non-Hispanic	COVID-19	179,168	575 (0.321)	346	(317, 374)	16,234	-	1.43	(1.30, 1.57)	<0.001
		Comparator	895,560	2,072 (0.231)	243	(232, 253)	37,292	47,980			
Other SDV											
Intent to Treat	Hispanic	COVID-19	19,770	89 (0.450)	473	(375, 571)	1106	-	1.57	(1.24, 1.99)	<0.001
		Comparator	96,476	287 (0.297)	302	(267, 337)	2345	-			
	Non-Hispanic	COVID-19	179,168	517 (0.289)	311	(284, 338)	16,235	-	1.36	(1.23, 1.50)	<0.001
		Comparator	895,560	1,994 (0.223)	228	(218, 238)	40,559	-			
Per Protocol	Hispanic	COVID-19	19,770	89 (0.450)	473	(375, 571)	1,106	-	1.52	(1.20, 1.93)	<0.001
		Comparator	96,476	287 (0.297)	311	(275, 347)	2,045	6292			
	Non-Hispanic	COVID-19	179,168	517 (0.289)	311	(284, 338)	16,235	-	1.34	(1.21, 1.48)	<0.001
		Comparator	895,560	1,986 (0.222)	232	(222, 243)	37,302	48,006			

Table ST8 Footnote: Abbreviations: PY: Person Years; CI: 95% confidence interval; HR: Hazard Ratio; SDV: Other Self-Directed Violence