**Multimedia Appendix 1**: Number of tweets by month comprising at least one of the terms "flu," "vaccination," "vaccine," "vaxx," and "covid.".

Month/Year	Number tweets (N=2,782,720) N (%)	of flu (N=647,839) N (%)	vaccination (N=220,122) N (%)	vaccine (N=1,826,094) N (%)	vaxx (N=34,522) N (%)	covid (N=775,829) N (%)
12/2019	1,197	631	102	400	27	0
	(0.04%)	(52.72%)	(8.52%)	(33.42%)	(2.26%)	(0.00%)
01/2020	43,074	21,641	2,702	15,872	1,403	3,132
	(1.55%)	(50.24%)	(6.27%)	(36.85%)	(3.26%)	(7.27%)
02/2020	65,993	36,387	2,727	21,729	1,744	15,130
	(2.37%)	(55.14%)	(4.13%)	(32.93%)	(2.64%)	(22.93%)
03/2020	238,675	148,965	4,497	64,952	1,665	61,223
	(8.58%)	(62.41%)	(1.88%)	(27.21%)	(0.70%)	(25.65%)
04/2020	197,011	78,394	8,302	102,358	1,938	45,300
	(7.08%)	(39.79%)	(4.21%)	(51.96%)	(0.98%)	(22.99%)
05/2020	150,584	50,496	5,875	89,465	1,853	37,727
	(5.41%)	(33.53%)	(3.90%)	(59.41%)	(1.23%)	(25.05%)
06/2020	76,073	28,289	3,173	40,463	887	18,932
	(2.73%)	(37.19%)	(4.17%)	(53.19%)	(1.17%)	(24.89%)
07/2020	128,239	43,161	4,891	75,732	1,537	35,395
	(4.61%)	(33.66%)	(3.81%)	(59.06%)	(1.20%)	(27.60%)
08/2020	110,794	34,001	4,934	69,554	1,507	30,633
	(3.98%)	(30.69%)	(4.45%)	(62.78%)	(1.36%)	(27.65%)
09/2020	125,957	38,466	4,106	81,735	1,906	35,993
	(4.53%)	(30.54%)	(3.26%)	(64.89%)	(1.51%)	(28.58%)
10/2020	107,615	47,340	3,430	53,833	883	32,817
	(3.87%)	(43.99%)	(3.19%)	(50.02%)	(0.82%)	(30.49%)
11/2020	162,202	29,688	6,292	122,168	1,563	47,654
	(5.83%)	(18.30%)	(3.88%)	(75.32%)	(0.96%)	(29.38%)
2020/12	346,928	34,709	24,141	281,748	4,247	108,525
	(12.47%)	(10.00%)	(6.96%)	(81.21%)	(1.22%)	(31.28%)
2021/01	227,599	15,134	31,640	175,760	2,010	75,997
	(8.18%)	(6.65%)	(13.90%)	(77.22%)	(0.88%)	(33.39%)
02/2021	198,355	11,830	29,680	151,984	1,962	67,374
	(7.13%)	(5.96%)	(14.96%)	(76.62%)	(0.99%)	(33.97%)
03/2021	291,140	14,183	42,204	228,382	3,683	82,158
	(10.46%)	(4.87%)	(14.50%)	(78.44%)	(1.27%)	(28.22%)
04/2021	311,284	14,524	41,426	249,959	5,707	77,839
	(11.19%)	(4.67%)	(13.31%)	(80.30%)	(1.83%)	(25.01%)