

Table S2: COVID-19 two-step ‘routine high-throughput approach’: selected simulation results

Overall prevalence (%)	Number of groups		Group size	Probability of positive groups ³ (%)		Number of positive groups		Number of overall cases		Post-simulation prevalence (%)		Number of required tests		Reduction in %	
	A ¹	B ²		A ¹	B ²	A ¹	B ²	A ¹	B ²	A ¹	B ²	A ¹	B ²	A ¹	B ²
1	75000	7500	3	3.0	3.0	1485	150	1497	151	1.00	1.01	54455	5450	64	64
1	50000	5000	5	5.0	5.1	1499	152	1542	155	1.03	1.03	37495	3760	75	75
1	15000	1500	10	9.8	10.5	1481	157	1547	161	1.03	1.07	29810	3070	80	80
1	6000	600	25	22.8	22.8	1379	137	1537	156	1.02	1.04	40250	4025	73	73
1	3000	300	50	41.5	38.3	1244	115	1571	154	1.05	1.03	65200	6050	58	60
1	1500	150	100	62.3	72.0	934	108	1454	184	0.97	1.23	94900	10950	37	27
5	75000	7500	3	14.4	14.8	7187	739	7559	774	5.04	5.16	71594	7217	52	52
5	50000	5000	5	22.6	22.4	6772	673	7480	743	5.00	4.95	63860	6365	57	58
5	15000	1500	10	39.4	40.8	5908	612	7425	763	4.95	5.09	74080	7620	51	49
5	6000	600	25	71.5	72.7	4297	436	7513	741	5.01	4.94	113425	11500	24	23
5	3000	300	50	92.3	91.3	2769	274	7445	752	4.96	5.01	141450	14000	6	7
5	1500	150	100	99.4	99.3	1491	149	7495	746	5.00	4.97	150600	15050	-0.4	-0.3
10	75000	7500	3	27.1	26.6	13555	1332	15015	1465	10.01	9.77	90665	8996	40	40
10	50000	5000	5	41.3	42.5	12383	1274	15035	1552	10.02	10.35	91915	9370	39	38
10	15000	1500	10	65.2	68.3	9787	1025	15143	1570	10.10	10.47	112870	11750	25	22
10	6000	600	25	93.2	91.2	5595	547	15108	1459	10.07	9.73	145875	14275	3	5
10	3000	300	50	99.5	99.7	2986	299	14815	1500	9.88	10.00	152300	15250	-2	-2
10	1500	150	100	100	100	1500	150	14865	1506	9.91	10.04	151500	15150	-1	-1

¹ population 150 000² population 15 000³ calculated after simulation