

Supplementary material

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Table S1. Weekly COVID-19 cases and Google Trends scores for COVID-19 related keywords for the period between May 18th and November 22nd, 2020 in Poland.

Date	New COVID-19		Smell		Taste		Shortness	
	cases	Headache	Cough	Loss	Loss	Dyspnea	of Breath	Fever
18/05/2020	2889	365	147	13	16	168	219	164
25/05/2020	2744	404	112	9	16	131	109	132
01/06/2020	2530	361	89	0	11	92	175	161
08/06/2020	3001	398	89	8	14	108	166	149
15/06/2020	2628	365	96	11	29	129	125	139
22/06/2020	2439	330	94	18	0	248	179	149

29/06/2020	1927	339	87	24	19	327	234	171
06/07/2020	2001	350	115	15	5	119	172	149
13/07/2020	2035	333	118	5	40	128	205	146
20/07/2020	2193	317	105	5	44	190	149	143
27/07/2020	3019	321	136	26	27	89	140	195
03/08/2020	4067	370	166	18	41	102	146	207
10/08/2020	4941	345	196	43	44	239	122	192
17/08/2020	4869	362	218	25	58	265	192	206
24/08/2020	5031	353	234	63	55	192	177	318
31/08/2020	5062	321	218	37	24	107	194	182
07/09/2020	3754	356	250	41	36	205	141	178
14/09/2020	3403	404	386	38	66	104	185	192
21/09/2020	5459	368	466	67	65	79	103	171
28/09/2020	8648	352	440	91	70	227	154	205
05/10/2020	13444	490	426	145	102	125	136	179
12/10/2020	28130	430	423	236	185	193	337	204

19/10/2020	53038	470	491	418	346	213	155	255
26/10/2020	80681	534	620	509	539	260	279	361
02/11/2020	131551	553	608	488	450	185	158	326
09/11/2020	172658	529	530	394	401	390	237	228
16/11/2020	165650	497	506	334	265	290	210	225

Table S2. Optimal time lag in weeks and corresponding cross correlation coefficients for each search term.

Term	Optimal lag	Cross correlation coefficient
Fever	-2	$r=0.749$ (95% CI, 0.557-0.942, $P<0.001$)
Headache	-1	$r=0.849$ (95% CI, 0.656-1, $P<0.001$)
Smell loss	-1	$r=0.910$ (95% CI, 0.718-1, $P<0.001$)
Cough	-1	$r=0.760$ (95% CI, 0.567-0.952, $P<0.001$)
Taste loss	-1	$r=0.933$ (95% CI, 0.740-1, $P<0.001$)
Dyspnea	0	$r=0.578$ (95% CI, 0.386-0.771, $P=0.003$)

Shortness of breath 0 $r=0.412$ (95% CI, 0.220-0.605, $P=0.032$)

Table S3. Time Series Regression for weekly case count with ‘smell loss’ and ‘taste loss’ Google Trend scores.

Variable	Coefficient
Smell Loss (Lagged -2)	340.726 (95% CI, 327.2-354.2, $P < 0.001$)
$R^2 = 0.990$	
Taste Loss (Lagged -1)	111.534 (95% CI, 65.4-157.6, $P < 0.001$)
Taste Loss (Lagged -2)	251.173 (95% CI, 201.2-301.1, $P < 0.001$)
$R^2 = 0.983$	