

## Appendix 1. Classification of Swedish municipalities by Swedish Association of Local Authorities and Regions.

Cities	Subdivisions
A. Large cities and municipalities near large cities	A1. Large cities - municipalities with a population of at least 200 000 inhabitants with at least 200 000 inhabitants in the largest urban area
	A2. Commuting municipalities near large cities – municipalities where more than 40 % of the working population commute to work in a large city or municipality near a large city
B. Medium-sized towns and municipalities near medium-sized towns	B1. Medium-sized towns – municipalities with a population of at least 50 000 inhabitants with at least 40 000 inhabitants in the largest urban area
	B2. Commuting municipalities near medium-sized towns - municipalities where more than 40 % of the working population commute to work in a medium-sized town
	B3. Commuting municipalities with a low commuting rate near medium-sized towns - municipalities where less than 40 % of the working population commute to work in a medium-sized town
C. Smaller towns/urban areas and rural municipalities	

Appendix 2. Population at baseline 31 December 2019 and number of clinical cases of COVID-19 with a positive PCR test (ICD-10 code of U07.1) or without a positive PCR-test (ICD-10 code of U07.2) during the follow-up to 31 December 2020.

Age (years)	Population 31 December 2019		Follow-up 1 January 2020 to 31 December 2020											
			Outpatients U07.1		Outpatients U07.2		Inpatients U07.1		Inpatients U07.2		Death U07.1		Death U07.2	
	Foreign-born	Swedish-born	Foreign-born	Swedish-born	Foreign-born	Swedish-born	Foreign-born	Swedish-born	Foreign-born	Swedish-born	Foreign-born	Swedish-born	Foreign-born	Swedish-born
20-24	130890	451905	268	526	117	293	177	264	39	84	1	3	0	1
25-29	166633	570134	370	899	211	464	306	476	41	129	0	9	0	0
30-34	212899	500818	591	760	305	460	509	451	66	159	5	10	0	1
35-39	215344	433442	750	704	358	372	687	417	54	104	2	9	0	1
40-44	184508	444949	767	846	401	445	762	551	58	93	10	12	0	0
45-49	159681	505086	856	1241	379	603	1015	975	53	121	25	23	0	2
50-54	143612	531542	932	1521	386	657	1206	1299	65	149	33	49	1	2
55-59	127683	490230	925	1341	381	580	1402	1410	78	227	85	72	0	8
60-64	101508	462106	760	1257	283	573	1235	1603	97	257	87	139	4	7
65-69	80018	452719	491	919	202	540	965	1596	92	319	123	283	8	11
70-74	65579	487054	379	1099	178	633	786	2305	95	518	188	632	8	38
75-79	45224	376619	298	1206	114	703	690	2700	78	525	239	1077	8	64
80-84	31837	236074	259	1058	92	578	663	2668	72	470	358	1531	20	80
85-88	11100	94473	99	555	36	277	283	1418	34	233	210	1081	5	53
Total	1676516	6037151	7745	13932	3443	7178	10686	18133	922	3388	1366	4930	54	268

Appendix 3. Crude incidence rate per 1000 inhabitants in working age 20-64 years. Number of cases in parenthesis. Job titles according to SSYK2012 divided by female (F), male (M), foreign- and Swedish-born, respectively. Clinical cases of COVID-19 are presented having a positive PCR test (ICD-10 code U07.1) or without a positive PCR-test (ICD-10 code U07.2), respectively.

		Crude incidence rate per 1000 inhabitants in 2020 (number of cases with COVID-19)											
		Outpatients U07.1		Outpatients U07.2		Inpatients U07.1		Inpatients U07.2		Death U07.1		Death U07.2	
SSYK2012	Sex	Foreign-born	Swedish-born	Foreign-born	Swedish-born	Foreign-born	Swedish-born	Foreign-born	Swedish-born	Foreign-born	Swedish-born	Foreign-born	Swedish-born
22-23 <sup>1</sup>	F	5.47 (343)	3.89 (1285)	2.03 (127)	1.17 (385)	3.65 (229)	1.70 (560)	0.41 (26)	0.26 (86)	0.02 (1)	0.03 (9)	0.00 (0)	0.00 (0)
	M	7.27 (230)	3.73 (370)	2.15 (68)	1.05 (104)	7.43 (235)	2.68 (266)	0.38 (12)	0.22 (22)	0.32 (10)	0.06 (6)	0.00 (0)	0.01 (1)
51-53 <sup>2</sup>	F	7.21 (1267)	3.29 (1886)	2.46 (432)	1.13 (649)	5.08 (894)	1.57 (900)	0.43 (75)	0.37 (211)	0.03 (6)	0.02 (13)	0.00 (0)	0.00 (0)
	M	5.28 (478)	2.04 (451)	2.42 (219)	1.03 (228)	6.59 (597)	1.88 (417)	0.41 (37)	0.16 (36)	0.23 (21)	0.06 (13)	0.01 (1)	0.00 (0)
83 <sup>3</sup>	F	3.99 (7)	1.03 (12)	1.71 (3)	1.55 (18)	2.28 (4)	0.26 (3)	0.00 (0)	0.43 (5)	0.00 (0)	0.00 (0)	0.00 (0)	0.00 (0)
	M	5.82 (199)	1.37 (142)	2.72 (93)	1.12 (116)	10.38 (355)	2.13 (220)	0.73 (25)	0.27 (28)	0.50 (17)	0.11 (11)	0.00 (0)	0.00 (0)
All other <sup>4</sup>	F	3.13 (639)	1.62 (1540)	1.58 (323)	0.93 (885)	3.08 (628)	1.10 (1041)	0.29 (59)	0.27 (256)	0.08 (16)	0.03 (28)	0.00 (0)	0.00 (1)
	M	3.46 (1132)	1.53 (2244)	1.76 (576)	0.81 (1181)	4.81 (1572)	1.69 (2473)	0.26 (85)	0.20 (293)	0.17 (57)	0.06 (87)	0.00 (0)	0.00 (5)
Missing <sup>5</sup>	F	3.77 (1029)	1.80 (585)	1.85 (505)	1.53 (495)	4.64 (1265)	1.96 (636)	0.45 (122)	0.53 (173)	0.11 (31)	0.19 (61)	0.00 (1)	0.03 (9)
	M	3.47 (920)	1.62 (657)	1.86 (493)	1.09 (440)	5.83 (1548)	2.39 (968)	0.43 (113)	0.55 (224)	0.34 (89)	0.24 (98)	0.01 (3)	0.01 (6)
Total	F	4.58 (3285)	2.43 (5308)	1.94 (1390)	1.11 (2432)	4.21 (3020)	1.44 (3140)	0.39 (282)	0.33 (731)	0.08 (54)	0.05 (111)	0.00 (1)	0.00 (10)
	M	3.95 (2959)	1.69 (3864)	1.94 (1449)	0.90 (2069)	5.75 (4307)	1.90 (4344)	0.36 (272)	0.26 (603)	0.26 (194)	0.09 (215)	0.01 (4)	0.01 (12)

<sup>1</sup>corresponding to ISCO-08 code 22 Health Professionals and 23 Teaching Professionals

<sup>2</sup>corresponding to ISCO-08 code 51 Personal Service workers. 52 Sales Workers and 53 Personal Care Workers

<sup>3</sup>corresponding to ISCO-08 code 83 Drivers and Mobile Plant Operators

<sup>4</sup>All other SSYK-codes lumped together

<sup>5</sup>Missing code according to SSYK e.g. unemployed. students