

SARS-CoV-2 surveillance strategy in essential workers of the Madrid City Council during the first epidemic wave in Spain, March-July of 2020

Mercedes Martinez-Cortes^{1*}, Carmen María Leon-Dominguez¹, Jovita Fernandez-Piñero⁴, Mercedes Rodriguez¹, Mercedes Almonacid¹, Maria Jose Ferrari¹, Rosario Romero¹, Alfonso Antonao¹, Maria Dolores Rivas¹, Miguel de la Fuente⁵, Beatriz Perez-Gomez^{2,3*}, Marina Pollán^{2,3*}

SUPPLEMENTARY MATERIAL

Contents

1. Working Group for the Surveillance and Early Detection of COVID19 infection in workers of the Madrid City Council
2. Supplementary Table S1
3. Supplementary Table S2
4. Questionnaire

Members of the Working Group for the Surveillance and Early Detection of COVID19 infection in workers of the Madrid City Council**Madrid City Council. Madrid Salud**

Antonio Prieto; Mercedes Rodriguez; Mercedes Almonacid; Alfonso Antona; M^a José Ferrari; Rosario Romero; Lola Rivas; José Manuel Díaz-Olalla; Carmen María León-Dominguez; Mercedes Martínez Cortés

Centro de Investigación en Sanidad Animal (INIA-CISA).

Marisa Arias; Jovita Fernandez-Pinero; Miguel Angel Jimenez- Clavero; Cristina Cano-Gómez; Pilar Aguilera-Sepúlveda

National Centre for Epidemiology, Instituto de Salud Carlos III. Consortium for Biomedical Research in Epidemiology and Public Health (CIBERESP)

Marina Pollán Santamaría; Beatriz Perez Gomez.

Demométrica SL

Miguel de la Fuente; Ana Rin

Supplementary table S1: Frequency of use of protective equipment by type of work

	Mask		Disinfectant products		Gloves		Disposal gowns		Face shields		Goggles		Protection suit	
Essential work collective	Adjusted prevalence % (95%CI)													
Telecommuting	72.58	71.13 - 74.03	80.43	79.26 - 81.60	56.41	54.88 - 57.93	4.26	3.46 - 5.05	5.86	4.87 - 6.86	8.45	7.37 - 9.53	4.75	3.73 - 5.78
	Prevalence ratio (95%CI)													
Telecommuting	ref	-	ref	-	ref	-	ref	-	ref	-	ref	-	ref	-
Policemen	1.11	1.08 - 1.15	1.12	1.09 - 1.15	1.15	1.09 - 1.21	0.26	0.18 - 0.38	0.28	0.20 - 0.38	0.85	0.69 - 1.05	0.16	0.11 - 0.24
Bus drivers	1.05	1.02 - 1.08	1.11	1.09 - 1.13	1.03	0.99 - 1.07	0.48	0.36 - 0.65	0.56	0.44 - 0.71	1.31	1.13 - 1.51	0.34	0.23 - 0.49
Cleaning Services	1.19	1.16 - 1.22	1.19	1.17 - 1.21	1.51	1.46 - 1.56	1.34	0.98 - 1.83	1.36	1.06 - 1.75	1.94	1.63 - 2.29	1.87	1.42 - 2.46
Firefighters	1.26	1.22 - 1.30	1.15	1.11 - 1.19	1.38	1.30 - 1.46	1.11	0.76 - 1.61	1.57	1.16 - 2.12	3.90	3.16 - 4.81	4.63	3.38 - 6.34
Emergency Healthcare Services	1.30	1.26 - 1.34	1.20	1.16 - 1.23	1.63	1.56 - 1.70	5.08	3.69 - 6.97	7.84	6.09 - 10.10	7.93	6.66 - 9.44	7.15	5.23 - 9.76
Burial Services	1.11	1.05 - 1.19	1.13	1.08 - 1.19	1.40	1.29 - 1.51	2.60	1.77 - 3.83	1.54	1.05 - 2.25	2.14	1.61 - 2.85	2.31	1.59 - 3.35
Central Market Workers	1.31	1.27 - 1.35	1.20	1.17 - 1.23	1.61	1.53 - 1.69	2.72	1.83 - 4.05	4.24	3.26 - 5.53	3.23	2.58 - 4.04	2.85	2.01 - 4.05
Public Health Services	1.14	1.10 - 1.18	1.06	1.03 - 1.10	1.22	1.16 - 1.29	2.03	1.51 - 2.74	1.15	0.85 - 1.56	0.90	0.69 - 1.18	1.05	0.73 - 1.50
Social Services	1.01	0.97 - 1.06	0.99	0.95 - 1.02	0.99	0.92 - 1.06	1.10	0.75 - 1.60	1.49	1.10 - 2.02	0.64	0.45 - 0.91	0.58	0.34 - 0.97

*Adjusted for age, sex, occupation, epidemiological week and laboratory

Supplementary table S2: Distribution of tested essential workers by collective and epidemiological week

Epidemiological Week	Policemen	Public Health Services	Social Services	Firefighters	Burial Services	Emergency Healthcare Services	Bus Drivers	Cleaning Services	Central Market Workers
22/03 to 28/03	223	79	49	85	29	167			
29/03 to 04/04	422	120	43	393	147	277			20
05/04 to 11/04	423	66	20	174	30	170			29
12/04 to 18/04	845	72	25	361	51	179			
19/04 to 25/04	668	71	60	223	78	68	29		
26/04 to 02/05	1,050	51	380	95	81	24	311	393	62
03/05 to 09/05	930	143	301	25	14	4	443	451	92
10/05 to 16/05	1,067	89	40	10	2	6	433	472	81
17/05 to 23/05	382	151	74	18	5	3	477	462	
24/05 to 30/05	219	110	67	16	2	4	406	350	15
31/05 to 06/06	180	106	7	3	2	2	352	75	
07/06 to 13/06	50	127	87		2	1	343	6	
14/06 to 20/06	15	91	15			4	484	1	
21/06 to 27/06	18	22	1			1	273		
28/06 to 04/07	32	72	31				848		37
05/07 to 11/07	30	30	7				940		14
Total	6,554	1,400	1,207	1,403	443	910	5,339	2,210	350

PCR TESTING QUESTIONNAIRE MADRID CITY COUNCIL

Completing this questionnaire will not take you more than 5 minutes.

Your answers will be very useful to interpret your results.

We would like to confirm your details below. If any information is missing or incorrect, please fill it in:

ID NUMBER	
GENDER: 1 MEN 2 WOMEN	
AGE (IN YEARS COMPLETED)	
SERVICE	
PHONE NUMBER	

P1. Have you had a PCR Test prior to the one on XX / XX / 20?

1. Yes
2. No

P1a. How many PCR test have you had?

___ (numeric)

P1b1. Thinking about the most recent PCR testing, when was it?

1. Less than seven days ago
2. From 7 to 14 days
3. From 15 days to 21 days
4. More than 3 weeks ago

P1c1. Test result:

1. Positive
2. Negative
3. Unknown

P1b2. Now thinking about your first PCR test, when was it?

4. Less than seven days ago
5. From 7 to 14 days
6. From 15 days to 21 days
7. More than 3 weeks ago

P1c2. Test result:

1. Positive
2. Negative
3. Unknown

P2. From the following list of possible reasons, do you know why you were PCR tested on XX / XX / 20? Multiple answer. (P2S01, P2S02, P2S03, P2S04)

1. Because I have had symptoms of coronavirus infection
2. It is a control test because I have been in isolation
3. It is a control test because I had other previous tests
4. Although none of the above conditions exist, I work in a high risk job and that is why it is done to me
5. I don't know

P3. Have you had CLOSE CONTACT with anyone...? (P3S01, P3S02) Multiple answer.

1. With symptoms of coronavirus infection
2. No symptoms of coronavirus infection but tested POSITIVE
3. No, I haven't

P3a. You have told us that you have had CLOSE contact with someone WITH symptoms of coronavirus infection. On what date did the contact occur? (P3_CON)

1. Less than seven days ago
2. From 7 to 14 days
3. From 15 days to 21 days
4. More than 3 weeks ago

P3a. You have told us that you have had CLOSE contact with someone WITHOUT symptoms of infection but who was POSITIVE in a Test. On what date did the contact occur? (P3_SIN)

1. Less than seven days ago
2. From 7 to 14 days
3. From 15 days to 21 days
4. More than 3 weeks ago

P3b. In what context did the contact occur? Multiple answer. (P3BS01, P3BS02)

1. At work
2. In your personal life

P3b1. Contact at work. This person / s was / n... Multiple answer. (P3B1S01, P3B1S02)

1. Co-worker
2. User/patient
3. Unknown

P3b2. Contact in your personal life. This person / s was / n... Multiple answer. (P3b2S01, P3b2S02, P3b2S03, P3b2S04, P3b2S05, P3b2S06)

1. Partner
2. Son
3. Parent
4. Other relative
5. Friends
6. Other people (indicate who)

P3b2. In my personal life, other people (specify) (P3B_B OTROS).

P.4. Have you had any of the following symptoms in the last 14 days?

P4_1a. Feeling short of breath

1. Yes → P4_1b.
2. No

P.4_1b. Does it persist today?

1. Yes
2. No

P4_2a. Fever over 37.7

1. Yes → P4_2b.
2. No

P.4_2b. Does it persist today?

1. Yes
2. No

P4_3a. Low-grade fever (between 36.5-37.6)

1. Yes → P4_3b.
2. No

P.4_3b. Does it persist today?

1. Yes
2. No

P4_4a. Dry and persistent cough.

1. Yes → P4_4b.
2. No

P.4_4b. Does it persist today?

1. Yes
2. No

P4_5a. Runny nose.

1. Yes → P4_5b.
2. No

P.4_5b. Does it persist today?

1. Yes
2. No

P4_6a. Sore throat.

1. Yes → P4_6b.
2. No

P.4_6b. Does it persist today?

1. Yes
2. No

P4_7a. Headache

1. Yes → P4_7b.
2. No

P.4_7b. Does it persist today?

1. Yes
2. No

P4_8a. Loss of smell and/or loss of taste.

1. Yes → P4_8b.
2. No

P.4_8b. Does it persist today?

1. Yes
2. No

P4_9a. Fatigue, tiredness

1. Yes → P4_9b.
2. No

P.4_9b. Does it persist today?

1. Yes
2. No

P4_10a. General discomfort

1. Yes → P4_10b.
2. No

P.4_10b. Does it persist today?

1. Yes
2. No

P4_11a. Unusual back pain.

1. Yes → P4_11b.
2. No

P.4_11b. Does it persist today?

1. Yes
2. No

P4_12a. Muscle pains

1. Yes → P4_12b.
2. No

P.4_12b. Does it persist today?

1. Yes
2. No

P4_13a. Nausea / vomiting

1. Yes → P4_13b.
2. No

P.4_13b. Does it persist today?

1. Yes
2. No

P4_14a. Diarrhoea

1. Yes → P4_14b.
2. No

P.4_14b. Does it persist today?

1. Yes
2. No

P.4d1. Have you been in any of these situations AS A PATIENT: Stay in the emergency room?

1. Yes
2. No

P.4d2. Have you been in any of these situations AS A PATIENT: hospital admission?

1. Yes
2. No

P5. Tell me if you have been diagnosed of the following conditions

	Yes	No	No answer
P5_1 Heart disease	1	2	9
P5_2 Arterial hypertension	1	2	9
P5_3 Bronchitis / emphysema	1	2	9
P5_4 Asthma	1	2	9
P5_5 Diabetes	1	2	9
P5_6 Immunity problems	1	2	9

P6. In this pandemic, how often have you had the following experiences?

	Never	Almost never	Often	Always	Don't know/no answer
P6_1 Being afraid of falling ill	1	2	3	4	9
P6_2 Feeling that I had little control over whether or not I could get infected	1	2	3	4	9
P6_3 Thinking that I had little chance of survival if I got infected	1	2	3	4	9
P6_4 Being worried about spreading the virus to someone else	1	2	3	4	9
P6_5 Thinking that my family is worried that I might infect them	1	2	3	4	9

P7. How often have you had the following experiences?

	Never	Almost never	Often	Always	Don't know/no answer
P7_1 Believe that my job is at high risk of infection	1	2	3	4	9
P7_2 Having a lot of stress at work	1	2	3	4	9
P7_3 Feeling that I am doing tasks that I am not prepared for	1	2	3	4	9
P7_4 Thinking about quitting my job because of the coronavirus	1	2	3	4	9
P7_5 Feeling that people avoid my family because of my work	1	2	3	4	9
P7_6 Be willing to accept the risks that my job implies	1	2	3	4	9

P8. How often have you used the following protective equipment while doing your professional work?

	Never	Almost never	Often	Always	Don't know/no answer
P8_1 Mask	1	2	3	4	9
P8_2 Gloves	1	2	3	4	9
P8_3 Desinfectant products	1	2	3	4	9
P8_4 Disposables gowns	1	2	3	4	9
P8_5 Face shields	1	2	3	4	9
P8_6 Glasses	1	2	3	4	9
P8_7 Protection suit	1	2	3	4	9
P8_8 Another type	1	2	3	4	9

P8_8_Others. Specify: _____