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Occupation and SARS-CoV-2 seroprevalence studies: a systematic review

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Occupation and SARS-CoV-2 seroprevalence studies: a systematic review

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6 **Word Count** 1179

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8 **Key Words** Covid-19, Infectious diseases, Occupational & industrial medicine

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11 **Key Messages**

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13 **1. What is already known about this subject?**

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15 Worldwide, workplace outbreaks of COVID-19 have been frequent, and some of the
16 largest reported. Accurate data on the risks of infection with SARS-CoV-2 infection and
17 other respiratory infections across a variety of occupations are needed to inform public
18 health interventions.
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21 **2. What are the new findings?**

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23 During the first year of the pandemic, a large number of seroprevalence studies covering
24 a broad range of occupations globally were published. Results suggest considerable
25 differences in the risk of SARS-CoV-2 infection between occupations.
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29 **3. How might this impact on policy or clinical practice in the foreseeable future?**

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31 Occupation appears to be an important correlate of SARS-CoV-2 infection. Additional
32 high-quality, well-powered serosurveys would improve our understanding of the
33 occupational risks of SARS-CoV-2 and other respiratory infections and should be
34 considered an essential component of the pandemic response.
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36 **Key Messages**
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ABSTRACT

Objective. To describe and synthesize studies of SARS-CoV-2 seroprevalence by occupation prior to the widespread vaccine rollout.

Methods. We identified studies of occupational seroprevalence from a living systematic review (PROSPERO CRD42020183634). Electronic databases, gray literature, and news media were searched for studies published January-December 2020. Seroprevalence estimates and a free text description of the occupation were extracted and classified according to the Standard Occupational Classification (SOC) 2010 system using a machine-learning algorithm. Due to heterogeneity, results were synthesized narratively.

Results. We identified 196 studies including 591,940 participants from 38 countries. Most studies (n=162; 83%) were conducted locally vs regionally or nationally. Sample sizes were generally small (median=220 participants per occupation) and 135 studies (69%) were at a high risk of bias. One or more estimates were available for 21/23 major SOC occupation groups, but over half of the estimates identified (n=359/600) were for healthcare-related occupations. 'Personal Care and Service Occupations' (median 22% [IQR 9-28%]; n=14) had the highest median seroprevalence.

Conclusions. Many seroprevalence studies covering a broad range of occupations were published in the first year of the pandemic. Results suggest considerable differences in seroprevalence between occupations, although few large, high-quality studies were done. Well-designed studies are required to improve our understanding of the occupational risk of SARS-CoV-2 and should be considered as an element of pandemic preparedness for future respiratory pathogens.

INTRODUCTION

Occupation is a social determinant of health and an important risk factor for SARS-CoV-2 infection. Essential workers in health and social care occupations have an increased risk of COVID-19 compared to non-essential workers, but the risks for other occupations are not well defined.¹⁻³ Studies using diagnostic or rapid testing results from health system and administrative data to examine occupational COVID-19 risk are affected by variable testing rates and access (e.g. due to workplace testing, paid sick leave, geographic, socio-economic factors). Few high-quality, prospective studies using frequent, serial diagnostic or rapid testing covering a broad range of occupations having been conducted.⁴

Serologic testing for SARS-CoV-2 antibodies provides evidence of previous infection and/or vaccination depending on vaccination status and the specific antigens targeted and can be used to obtain more accurate estimates of the cumulative incidence of infection.⁵ Accurate data on the occupational risks of COVID-19 and other respiratory infections are essential for informing compliance with workplace safety regulations, transmission control measures and resource allocation (testing, personal protective equipment (PPE), etc.). The objectives of this review were to describe and synthesize studies of SARS-CoV-2 seroprevalence across a broad range of occupations globally prior to the widespread rollout of vaccines.

METHODS

We identified studies of occupational seroprevalence from a living systematic review (PROSPERO CRD42020183634) of >1000 seroprevalence studies.⁶ In brief, electronic databases, grey literature, and news media were searched for cohort or cross-sectional studies

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3 reporting antibody testing for SARS-CoV-2. Records were screened independently, in duplicate.
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5 We restricted eligibility to studies that in English, French or that were machine-translatable and
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7 published January-December 2020 before vaccines were rolled-out, because differential
8
9 vaccination rates by occupation would obscure results. We extracted seroprevalence estimates
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11 with a free-text description for each occupation. If multiple estimates were reported, the most
12
13 recent estimate using laboratory-based methods (e.g. ELISA), and anti-spike and/or IgG
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15 antibodies were prioritized, because non-IgG and anti-nucleocapsid antibodies may decline more
16
17 rapidly.⁷ Study-level risk of bias was assessed with a modified Joanna Briggs Institute Checklist
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19 for Prevalence Studies (**Table S1**).⁸
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26 For each seroprevalence estimate, we identified the relevant Standard Occupational
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28 Classification (SOC) 2010 codes by applying the National Institute for Occupational Safety &
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30 Health (NIOSH) Industry and Occupation Computerized Coding System (NIOCCS) to
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32 occupation descriptions.⁹ NIOCCS was chosen, because most studies were conducted in the
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34 USA. Coding was manually verified if there was insufficient information for classification or the
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36 probability of correct classification was <0.8. Anticipating substantial heterogeneity and an
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38 insufficient number of estimates relative to covariates for meta-regression, we planned to
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40 summarize data using the median/IQR.
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47 **Patient and Public Involvement:** It was not possible or appropriate to involve patients or the
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49 public in this study.
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RESULTS

We identified 196 studies of occupational seroprevalence conducted in 2020 during the first and second waves of the pandemic. There were 591,940 participants from 38 countries, including the USA (n=44 studies), UK (n=16) and Italy (n=15). Most studies (n=162; 83%) were conducted locally (e.g. city, county) as opposed to regionally (e.g. state; n=20; 10%) or nationally (n=14; 7%). Most were restricted to one occupational group (n=103), limiting direct comparisons (i.e. using the same reference group). Sample sizes were often small (median=220, IQR 64-568 participants). Overall, 135 studies (69%) were at a high risk of bias, 47 moderate (24%), 2 low (1%) and 12 unclear (6%). Common reasons for bias were inadequate statistical analysis (i.e. no adjustment for test or sample characteristics; 92%), non-probability sampling (74%), and small sample-size (46%).

At least one estimate was available for all 23 major SOC occupation groups, except for 'Legal' and 'Military-Specific' occupations (**Figure 1**; all studies). Over half of the 600 estimates identified (n=359) were for healthcare-related occupations. For SOC groups with three or more estimates, the highest median seroprevalence was reported for 'Personal Care and Service Occupations' (median 22% [IQR 9-28%]; n=14, e.g. 'Personal Care Aids'). The next highest was reported for 'Building and Grounds Cleaning and Maintenance' occupations (11% [3-22%]; n=17, e.g. 'Maids and Housekeeping Cleaners'), and 'Healthcare Support' (11% [2-20%]; n=39, e.g. 'Nursing Assistants') occupations. The lowest median seroprevalence was 1% (0-11%; n=6, e.g. 'Athletes') for 'Arts, Design, Entertainment, Sports, and Media Occupations.' Individual estimates are listed in **Table S2**.

DISCUSSION

This review is the first comprehensive synthesis of occupational COVID-19 seroprevalence studies world-wide. We identified 196 studies representing 21 out of 23 major SOC groups conducted during the first and second waves of the SARS-CoV-2 pandemic in 2020, prior to the widespread rollout of vaccines, and described occupational groups with high seroprevalence.

Seroprevalence studies may estimate the cumulative incidence of infection more accurately than diagnostic testing studies when access to testing is variable.^{2,4} The data identified suggest considerable differences in seroprevalence by occupation, though we did not statistically test for differences due to considerable variation in geography, study dates and workplace determinants of infection (e.g. PPE, ventilation). ‘Caring and Personal Service’ occupations had the highest median seroprevalence (22%), which was four-times higher than the unemployed (5%) and median seroprevalence across all occupational groups (5%). The UK Office for National Statistics reported a slightly lower mean risk of a positive diagnostic or rapid test for COVID-19 across 25 occupational groups of 4%,¹⁰ but the discrepancy between the true cumulative incidence and confirmed infections is likely greater in regions with less access to testing: national, population-based serosurveys have estimated there are 10-20 serologically identifiable cases per one confirmed case.⁶

In future pandemics, large, well-reported, high-quality seroprevalence studies across a broad range of occupations are needed at an early stage to inform appropriate workplace policy. It has been suggested that 20% of the US workforce was exposed to disease or infection at work at

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3 least once a month prior to the pandemic.¹¹ Public health agencies require accurate data on the
4 occupational risks of respiratory infections, including SARS-CoV-2, to inform compliance with
5 workplace safety regulations, transmission control measures and allocate limited resources (e.g.
6 testing, personal protective equipment and vaccines) during outbreaks and pandemics. For
7 governments, there are also issues of occupational disease recognition and compensation to be
8 considered. As such, public health agencies and governments may be best positioned to
9 coordinate these types of studies, as opposed to academic institutions,⁶ which led the majority of
10 serosurveys in the first year of the pandemic.
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24 **Strengths and Limitations**

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26 Despite the large number of studies of occupational seroprevalence conducted, many studies had
27 methodological limitations. Only two studies were at a low risk of bias and most occupational
28 subgroups had small sample sizes (median 220 participants). Many were limited to one major
29 SOC group (n=103 studies), which precluded comparisons. Detailed descriptions of occupations
30 were often lacking, potentially contributing to coding errors, and workplace determinants of
31 infection (e.g. use of PPE) were poorly reported.
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42 In conclusion, our review shows that a large number of seroprevalence studies covering a broad
43 range of occupations were published in the first year of the pandemic. Results suggest
44 considerable differences in seroprevalence between occupations, although few large, well-
45 reported, high-quality studies were done. Carefully-designed, adequately powered
46 seroprevalence studies with coverage of a broad range of occupations could improve our
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3 understanding of the occupational risk of SARS-CoV-2 and other respiratory infections and
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5 should be considered an element of pandemic preparedness.
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Statement of author's contributions

This secondary analysis of the SeroTracker database was conceived by NB, EB, DK and AA. Senior authors on this paper were NB, DK, RA and AA. The protocol was developed by EB, NB and DK. Data cleaning was performed by CC, CD, ND, SD and EB and verification by EB, SD, ND and GB. Analysis was performed by EB and RA. The first draft of the manuscript was written by EB and revised by EB, RA, NB, ND, GB, SD, CC, AA, DK. The SeroTracker Consortium maintained the living systematic review database used in the study. All authors reviewed and agreed to the findings, and also provided critical revisions to the paper.

Disclosure of potential and actual conflicts of interest

RKA was previously a Technical Consultant for the Bill and Melinda Gates Foundation Strategic Investment Fund, is a minority shareholder of Alethea Medical, and was a former Senior Policy Advisor at Health Canada. Each of these relationships is unrelated to the present work.

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3 JP reports grants to his institution from MedImmune, Sanofi Pasteur, Merck and AbbVie, and
4
5 personal fees for lectures from AbbVie and Astra-Zeneca, all outside of the submitted work.
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10 MPC reports grants from McGill Interdisciplinary Initiative in Infection and Immunity, grants
11
12 from Canadian Institutes of Health Research, during the conduct of the study; personal fees from
13
14 GEn1E Lifesciences, personal fees from nplex biosciences, personal fees from Kanvas
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16 biosciences, personal fees from AstraZeneca, non-financial support from Cidara therapeutics,
17
18 non-financial support from Scynexis, Inc., non-financial support from Amplyx Pharmaceuticals,
19
20 outside the submitted work. In addition, MPC has a patent for methods detecting tissue damage,
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22 graft versus host disease, and infections using cell-free DNA profiling pending, a patent for
23
24 methods assessing the severity and progression of SARS-CoV-2 infections using cell-free DNA
25
26 pending, a patent for rapid identification of antimicrobial resistance and other microbial
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28 phenotypes using highly-multiplexed fluorescence in situ hybridization pending, and a patent
29
30 highly multiplexed detection of gene expression with hybridization chain reaction pending, all
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32 outside the submitted work.
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39 **Ethics approval:** Not applicable. This study did not involve human participants or animals.
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42 **Dating sharing:** Data included in the analysis is available in Table S2 or from
43 <https://serotracker.com>.
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3 **Figure Legends**
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8 **Figure 1.** Seroprevalence by SOC 2010 major occupation group. *Estimates are a mix of
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10 ‘Healthcare Practitioners and Technical Occupations’ and ‘Healthcare Support Occupations’ (see
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12 next page)
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17 **Table S1.** Modified Joanna Briggs Institute Risk of Bias Tool (supplementary files)
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21 **Table S2.** Summary of included studies (supplementary files)
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SOC 2010 Major Occupation Group	Total		BMJ Open	Median, IQR		Seroprevalence %		Page No. of 109
	Estimates	Countries	Study dates, midpoint	Sample size	(Median, IQR)	(Scale 0-75%)	Low-Moderate RoB	
1 Architecture and Engineering Occupations (17-0000)	1	1	15/08 (15/08-15/08)	21 (21-21)	42.9 (42.9-42.9)		0 (0%)	
2 Personal Care and Service Occupations (39-0000)	14	7	03/05 (02/04-02/06)	127 (54-302)	21.5 (9.32-27.76)		3 (21%)	
3 Installation, Maintenance, and Repair Occupations (49-0000)	1	1	19/06 (19/06-19/06)	134 (134-134)	16.4 (16.4-16.4)		0 (0%)	
4 Building and Grounds Cleaning and Maintenance Occupations (37-0000)	17	8	13/07 (09/06-16/08)	102 (42-226)	10.8 (3.3-21.7)		6 (35%)	
5 Healthcare Support Occupations (31-0000)	39	12	05/06 (19/05-21/06)	263 (122-562)	10.7 (2-20.05)		12 (31%)	
6 Business and Financial Operations Occupations (13-0000)	2	2	05/07 (18/06-22/07)	462 (252-671)	8.27 (5.3-11.23)		2 (100%)	
8 Management Occupations (11-0000)	10	6	17/06 (01/05-02/08)	44 (23-145)	8.17 (6.7-19.93)		3 (30%)	
9 Food Preparation and Serving Related Occupations (35-0000)	6	4	17/06 (11/05-23/07)	58 (12-108)	6.35 (2.37-24.03)		2 (33%)	
10 Healthcare Practitioners and Technical Occupations (29-0000)	222	23	13/06 (13/05-13/07)	215 (64-482)	5.91 (1.83-11.71)		84 (38%)	
11 Healthcare Practitioners and Technical Occupations, 5-digit codes**								
12 Miscellaneous Health Technologists and Technicians	4	3	26/08 (09/08-12/09)	60 (20-121)	12.96 (9.09-27.54)		1 (25%)	
13 Registered Nurses	78	18	05/06 (05/05-05/07)	329 (71-1000)	8.44 (3.68-15.5)		22 (28%)	
14 Clinical Laboratory Technologists and Technicians	18	12	15/06 (19/05-11/07)	204 (86-284)	6.22 (2.07-11.94)		12 (67%)	
16 Physicians and Surgeons	65	21	09/06 (10/05-09/07)	214 (59-564)	5.88 (1.85-11.8)		23 (35%)	
17 Emergency Medical Technicians and Paramedics	9	6	13/06 (27/05-30/06)	157 (56-243)	5.41 (5.2-11)		4 (44%)	
18 Therapists	15	4	08/06 (19/05-28/06)	121 (61-235)	3.75 (0-9.45)		7 (47%)	
19 Physician Assistants	9	2	27/06 (26/05-28/07)	230 (156-320)	3.48 (0.64-9.43)		3 (33%)	
21 Pharmacists	9	7	29/06 (14/06-14/07)	113 (29-213)	0.5 (0-3.45)		4 (44%)	
22 Healthcare Occupations (mixed)*	94	25	05/06 (29/04-12/07)	375 (110-1012)	5.66 (2.35-11.6)		23 (24%)	
23 Sales and Related Occupations (41-0000)	23	8	21/08 (22/06-19/10)	643 (236-1184)	5.3 (1.2-8.8)		6 (26%)	
24 Education, Training, and Library Occupations (25-0000)	6	5	05/07 (12/06-27/07)	238 (73-1305)	5.07 (2.71-17.22)		3 (50%)	
25 Farming, Fishing, and Forestry Occupations (45-0000)	3	3	13/07 (25/06-30/07)	80 (66-100)	5 (2.5-5)		1 (33%)	
26 Not employed (mixed)*	37	14	23/06 (12/05-04/08)	382 (116-905)	4.9 (2.7-14.97)		28 (76%)	
28 Office and Administrative Support Occupations (43-0000)	39	18	14/06 (18/05-11/07)	120 (32-522)	4.88 (1.36-13.36)		20 (51%)	
29 First responders (mixed)*	6	1	18/05 (13/05-22/05)	219 (72-599)	4.67 (1.6-7.34)		1 (17%)	
30 Community and Social Service Occupations (21-0000)	6	2	30/05 (18/05-11/06)	104 (49-188)	4.45 (2.13-6.1)		1 (17%)	
32 Protective Service Occupations (33-0000)	28	9	04/07 (21/05-16/08)	190 (46-555)	4.29 (2.17-7.47)		6 (21%)	
33 Transportation and Material Moving Occupations (53-0000)	23	7	08/08 (08/06-08/10)	230 (80-364)	3.5 (1.8-11.8)		8 (35%)	
34 Life, Physical, and Social Science Occupations (19-0000)	11	7	06/07 (11/06-30/07)	343 (174-570)	2.6 (1.66-6.46)		4 (36%)	
35 Production Occupations (51-0000)	4	3	23/05 (26/04-19/06)	764 (342-1132)	1.52 (1.45-4.93)		2 (50%)	
36 Arts, Design, Entertainment, Sports, and Media Occupations (27-0000)	6	5	07/07 (04/06-09/08)	164 (47-823)	1.39 (0.18-11.02)		3 (50%)	
38 Computer and Mathematical Occupations (15-0000)	1	1	03/05 (03/05-03/05)	47 (47-47)	0 (0-0)		1 (100%)	
39 Construction and Extraction Occupations (47-0000)	1	1	03/05 (03/05-03/05)	42 (42-42)	0 (0-0)		1 (100%)	

Supplementary File I. List of all estimates, included studies and references

SOC 2010 Major Group	Study	N	SOC 2010 Occupation Title	Study Type	Study Dates	Country	Serum positive prevalence (95% CIs)	Overall Risk of Bias (JBI)
Not employed (mixed)*	Merkely et al., 2020 ¹	n=209	Homemaker (Unpaid)	Cross-sectional survey	05/01 - 05/16	Hungary	0.73% (0-1.74%)	Moderate
Not employed (mixed)*	Siddiqui et al., 2020 ²	n=37	Homemaker (Unpaid)	Prospective cohort	04/15 - 08/15	India	18.9%	High
Not employed (mixed)*	Biggs et al., 2020 ³	n=157	Retired (Unpaid)	Cross-sectional survey	04/28 - 05/03	United States of America	1.91%	Moderate
Not employed (mixed)*	Carrat et al., 2020 ⁴	n=5381	Retired (Unpaid)	Prospective cohort	05/04 - 06/23	France	4.3% (3.5-5%)	Moderate
Not employed (mixed)*	Merkely et al., 2020 ¹	n=2767	Retired (Unpaid)	Cross-sectional survey	05/01 - 05/16	Hungary	1.09% (0.66-1.52%)	Moderate
Not employed (mixed)*	Richard et al., 2020 ⁵	n=1635	Retired (Unpaid)	Cross-sectional survey	04/06 - 06/30	Switzerland	4.3%	Low
Not employed (mixed)*	Siddiqui et al., 2020 ²	n=10	Retired (Unpaid)	Prospective cohort	04/15 - 08/15	India	20%	High
Not employed (mixed)*	Alemu et al., 2020 ⁶	n=32	Student (Unpaid)	Cross-sectional survey	04/23 - 04/28	Ethiopia	15.6%	Moderate
Not employed (mixed)*	Biggs et al., 2020 ³	n=16	Student (Unpaid)	Cross-sectional survey	04/28 - 05/03	United States of America	12.5%	Moderate
Not employed (mixed)*	Brehm et al., 2020 ⁷	n=73	Student (Unpaid)	Cross sectional study with prospective cohort follow up of a subset of the sample	03/20 - 07/17	Germany	2.7%	Moderate
Not employed (mixed)*	Carrat et al., 2020 ⁴	n=81	Student (Unpaid)	Prospective cohort	05/04 - 06/23	France	7.2% (0.1-12.6%)	Moderate

Not employed (mixed)*	Iversen et al., 2020 ⁸	n=688	Student (Unpaid)	Cross-sectional survey	04/15 - 04/22	Denmark	14.97%	Low
Not employed (mixed)*	Lumley et al., 2020 ⁹	n=620	Student (Unpaid)	Prospective cohort	04/23 - 11/30	The United Kingdom	6.77%	Moderate
Not employed (mixed)*	Merkely et al., 2020 ¹	n=774	Student (Unpaid)	Cross-sectional survey	05/01 - 05/16	Hungary	0.69% (0-1.49%)	Moderate
Not employed (mixed)*	Richard et al., 2020 ⁵	n=666	Student (Unpaid)	Cross-sectional survey	04/06 - 06/30	Switzerland	10.5%	Low
Not employed (mixed)*	Shakiba et al., 2020 ¹⁰	n=114	Student (Unpaid)	Cross-sectional survey	04/11 - 04/19	Iran (Islamic Republic of)	17.5% (11.3-23.7%)	Moderate
Not employed (mixed)*	Siddiqui et al., 2020 ²	n=14	Student (Unpaid)	Prospective cohort	04/15 - 08/15	India	21.4%	High
Not employed (mixed)*	Tilley et al., 2020 ¹¹	n=790	Student (Unpaid)	Cross-sectional survey	04/29 - 05/08	United States of America	4% (3-5.1%)	Moderate
Not employed (mixed)*	Tsitsilonis et al., 2020 ¹²	n=1395	Student (Unpaid)	Cross-sectional survey	06/15 - 07/15	Greece	0.42% (0.03-1.5%)	Moderate
Not employed (mixed)*	Arnaldo et al., 2020 ¹³	n=513	Military, Rank Not Specified	Cross-sectional survey	07/06 - 07/13	Mozambique	3.7%	High
Not employed (mixed)*	Arnaldo et al., 2020 ¹⁴	n=116	Military, Rank Not Specified	Cross-sectional survey	11/02 - 11/12	Mozambique	1.7%	High
Not employed (mixed)*	Mabunda et al., 2020 ¹⁵	n=324	Military, Rank Not Specified	Cross-sectional survey	09/21 - 10/02	Mozambique	2.8%	High
Not employed (mixed)*	Mahomed et al., 2020 ¹⁶	n=116	Military, Rank Not Specified	Cross-sectional survey	11/26 - 12/03	Mozambique	18.1%	High
Not employed (mixed)*	Payne et al., 2020 ¹⁷	n=382	Military, Rank Not Specified	Cross-sectional survey	04/20 - 04/24	United States of America	59.7%	High
Not employed (mixed)*	World et al., 2020 ¹⁸	n=6900	Military, Rank Not Specified	Cross-sectional survey	08/15 - 10/15	Republic of Korea	0.36%	Unclear
Management Occupations (11-0000)	Shakiba et al., 2020 ¹⁰	n=16	Farmers, Ranchers, and Other Agricultural Managers	Cross-sectional survey	04/11 - 04/19	Iran (Islamic Republic of)	19.7% (9.1-31%)	Moderate
Management Occupations (11-	Favara et al., 2020 ¹⁹	n=43	Medical and Health Services Managers	Cross-sectional survey	07/13 - 07/13	The United Kingdom	9.3%	High

0000)								
Management Occupations (11-0000)	Galan et al., 2020 ²⁰	n=170	Medical and Health Services Managers	Cross-sectional survey	04/14 - 04/27	Spain	27.6%	High
Management Occupations (11-0000)	Hunter et al., 2020 ²¹	n=44	Medical and Health Services Managers	Cross-sectional survey	04/29 - 05/08	United States of America	4.55%	High
Management Occupations (11-0000)	Leidner et al., 2020 ²²	n=257	Medical and Health Services Managers	Cross sectional study with prospective cohort follow up of a subset of the sample	04/08 - 05/22	United States of America	3.11%	High
Management Occupations (11-0000)	Martin et al., 2020 ²³	n=2078	Medical and Health Services Managers	Cross-sectional survey	05/29 - 07/13	The United Kingdom	6.79%	Moderate
Management Occupations (11-0000)	Siddiqui et al., 2020 ²	n=15	Medical and Health Services Managers	Prospective cohort	04/15 - 08/15	India	20%	High
Management Occupations (11-0000)	Baracco et al., 2020 ²⁴	n=45	Managers, All Other	Cross-sectional survey	04/23 - 05/05	Italy	6.67%	High
Management Occupations (11-0000)	Goenka et al., 2020 ²⁵	n=71	Managers, All Other	Cross-sectional survey	07/12 - 08/23	India	7.04%	Moderate
Management Occupations (11-0000)	Goenka et al., 2020 ²⁶	n=13	Managers, All Other	Cross-sectional survey	08/01 - 08/31	India	38.46%	High
Business and Financial Operations Occupations (13-0000)	Satpati et al., 2020 ²⁷	n=43	Management Analysts	Cross-sectional survey	07/26 - 08/08	India	2.33%	Moderate
Business and Financial	Poustchi et al., 2020 ²⁸	n=880	Financial Specialists	Cross-sectional survey	04/17 - 06/02	Iran (Islamic Republic of)	14.2% (12.1-16.5%)	Moderate

Operations Occupations (13-0000)								
Computer and Mathematical Occupations (15-0000)	Biggs et al., 2020 ³	n=47	Computer User Support Specialists	Cross-sectional survey	04/28 - 05/03	United States of America	0%	Moderate
Architecture and Engineering Occupations (17-0000)	Siddiqui et al., 2020 ²	n=21	Engineers	Prospective cohort	04/15 - 08/15	India	42.9%	High
Life, Physical, and Social Science Occupations (19-0000)	Jones et al., 2020 ²⁹	n=245	Medical Scientists	Cross-sectional survey	01/15 - 06/15	The United Kingdom	1.9%	High
Life, Physical, and Social Science Occupations (19-0000)	Anna et al., 2020 ³⁰	n=505	Medical Scientists, Except Epidemiologists	Prospective cohort	04/28 - 07/31	France	8.71%	Moderate
Life, Physical, and Social Science Occupations (19-0000)	Erber et al., 2020 ³¹	n=635	Medical Scientists, Except Epidemiologists	Cross-sectional survey	04/14 - 05/29	Germany	1.24%	High
Life, Physical, and Social Science Occupations (19-0000)	Favara et al., 2020 ¹⁹	n=38	Medical Scientists, Except Epidemiologists	Cross-sectional survey	07/13 - 07/13	The United Kingdom	2.6%	High
Life, Physical, and Social Science Occupations (19-0000)	Hanrath et al., 2020 ³²	n=468	Medical Scientists, Except Epidemiologists	Cross-sectional survey	05/29 - 07/06	The United Kingdom	6.2%	High
Life, Physical, and Social Science Occupations (19-0000)	Leidner et al., 2020 ²²	n=2654	Medical Scientists, Except Epidemiologists	Cross sectional study with prospective cohort follow up of a subset of the sample	04/08 - 05/22	United States of America	2.22%	High

Life, Physical, and Social Science Occupations (19-0000)	Martin et al., 2020 ²³	n=1154	Medical Scientists, Except Epidemiologists	Cross-sectional survey	05/29 - 07/13	The United Kingdom	9.71%	Moderate
Life, Physical, and Social Science Occupations (19-0000)	Rosser et al., 2020 ³³	n=102	Medical Scientists, Except Epidemiologists	Cross-sectional survey	04/20 - 05/20	United States of America	0.98%	High
Life, Physical, and Social Science Occupations (19-0000)	Silva et al., 2020 ³⁴	n=69	Chemists	Cross-sectional survey	06/05 - 07/31	Brazil	4%	High
Life, Physical, and Social Science Occupations (19-0000)	Tsitsilonis et al., 2020 ¹²	n=250	Physical Scientists, All Other	Cross-sectional survey	06/15 - 07/15	Greece	1.42% (0-7.24%)	Moderate
Community and Social Service Occupations (21-0000)	Jones et al., 2020 ²⁹	n=211	Healthcare Social Workers	Cross-sectional survey	01/15 - 06/15	The United Kingdom	6.3%	High
Community and Social Service Occupations (21-0000)	Leidner et al., 2020 ²²	n=235	Social Workers, All Other	Cross sectional study with prospective cohort follow up of a subset of the sample	04/08 - 05/22	United States of America	3.4%	High
Community and Social Service Occupations (21-0000)	Rosser et al., 2020 ³³	n=117	Social Workers, All Other	Cross-sectional survey	04/20 - 05/20	United States of America	1.71%	High
Community and Social Service Occupations (21-0000)	Sabourin et al., 2020 ³⁵	n=91	Social Workers, All Other	Cross-sectional survey	07/15 - 08/15	United States of America	5.49%	High
Community and Social Service	Yogo et al., 2020 ³⁶	n=35	Social Workers, All Other	Cross-sectional survey	05/20 - 06/08	United States of America	0%	High

Occupations (21-0000)								
Community and Social Service Occupations (21-0000)	Biggs et al., 2020 ³	n=6	Religious Workers	Cross-sectional survey	04/28 - 05/03	United States of America	16.67%	Moderate
Education, Training, and Library Occupations (25-0000)	Campos et al., 2020 ³⁷	n=2715	Postsecondary Teachers	Cross-sectional survey	05/13 - 07/10	Portugal	2.6%	High
Education, Training, and Library Occupations (25-0000)	Goncalves et al., 2020 ³⁸	n=1636	Postsecondary Teachers	Cross-sectional survey	06/15 - 06/30	Portugal	3.05%	Moderate
Education, Training, and Library Occupations (25-0000)	Tsitsilonis et al., 2020 ¹²	n=312	Postsecondary Teachers	Cross-sectional survey	06/15 - 07/15	Greece	1.2% (0.14-3.7%)	Moderate
Education, Training, and Library Occupations (25-0000)	Fontanet et al., 2020 ³⁹	n=42	Elementary and Middle School Teachers	Retrospective cohort	04/28 - 04/30	France	7.1%	Moderate
Education, Training, and Library Occupations (25-0000)	Siddiqui et al., 2020 ²	n=8	Elementary and Middle School Teachers	Prospective cohort	04/15 - 08/15	India	25%	High
Education, Training, and Library Occupations (25-0000)	Torres et al., 2020 ⁴⁰	n=165	Elementary and Middle School Teachers	Cross-sectional survey	05/04 - 05/19	Chile	20.6% (14.7-27.6%)	High

1 2 3 4 5 6 7	Arts, Design, Entertainment, Sports, and Media Occupations (27-0000)	Halatoko et al., 2020 ⁴¹	n=55	Fine Artists, Including Painters, Sculptors, and Illustrators	Cross-sectional survey	04/23 - 05/08	Togo	0%	High
8 9 10 11 12 13	Arts, Design, Entertainment, Sports, and Media Occupations (27-0000)	Slusser et al., 2020 ⁴²	n=5603	Athletes, Coaches, Umpires, and Related Workers	Cross-sectional survey	04/08 - 04/21	United States of America	0.7% (0.28-1.15%)	Unclear
14 15 16 17 18	Arts, Design, Entertainment, Sports, and Media Occupations (27-0000)	Vince et al., 2020 ⁴³	n=272	Athletes, Coaches, Umpires, and Related Workers	Prospective cohort	05/29 - 07/31	Croatia	14%	Moderate
19 20 21 22 23	Arts, Design, Entertainment, Sports, and Media Occupations (27-0000)	Vince et al., 2020 ⁴³	n=43	Coaches and Scouts	Prospective cohort	05/29 - 07/31	Croatia	16.3%	Moderate
24 25 26 27 28	Arts, Design, Entertainment, Sports, and Media Occupations (27-0000)	Mack et al., 2020 ⁴⁴	n=1007	Umpires, Referees, and Other Sports Officials	Prospective cohort	06/16 - 06/30	Germany	2.09% (1.37-3.17%)	High
29 30 31 32 33	Arts, Design, Entertainment, Sports, and Media Occupations (27-0000)	Khan et al., 2020 ⁴⁵	n=44	Media and Communication Workers	Cross-sectional survey	07/01 - 07/15	India	0%	Moderate
34 35 36 37 38 39	Healthcare Practitioners and Technical Occupations (29-0000)	Akinbami et al., 2020 ⁴⁶	n=566	Healthcare Practitioners and Technical Occupations	Cross-sectional survey	05/18 - 06/13	United States of America	4.6% (3-6.7%)	Moderate

Healthcare Practitioners and Technical Occupations (29-0000)	Khan et al., 2020 ⁴⁵	n=355	Healthcare Practitioners and Technical Occupations	Cross-sectional survey	07/01 - 07/15	India	4.8% (3-7.6%)	Moderate
Healthcare Practitioners and Technical Occupations (29-0000)	Leidner et al., 2020 ²²	n=402	Healthcare Practitioners and Technical Occupations	Cross sectional study with prospective cohort follow up of a subset of the sample	04/08 - 05/22	United States of America	1.49%	High
Healthcare Occupations (mixed)*	Hanrath et al., 2020 ³²	n=102	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	05/29 - 07/06	The United Kingdom	6.62%	High
Healthcare Occupations (mixed)*	Jones et al., 2020 ²⁹	n=413	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	01/15 - 06/15	The United Kingdom	7.8%	High
Healthcare Occupations (mixed)*	Martin et al., 2020 ²³	n=550	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	05/29 - 07/13	The United Kingdom	10.36%	Moderate
Healthcare Occupations (mixed)*	Amendola et al., 2020 ⁴⁷	n=117	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	04/15 - 04/15	Italy	4.27%	High
Healthcare Occupations (mixed)*	Arnaldo et al., 2020 ⁴⁸	n=543	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	08/10 - 08/21	Mozambique	3.7%	High

Healthcare Occupations (mixed)*	Bal et al., 2020 ⁴⁹	n=190	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	04/10 - 05/28	France	3.68%	High
Healthcare Occupations (mixed)*	Barallat et al., 2020 ⁵⁰	n=429	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	05/04 - 05/22	Spain	7.69%	High
Healthcare Occupations (mixed)*	Bardai et al., 2020 ⁵¹	n=35	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	06/10 - 07/27	Canada	11%	High
Healthcare Occupations (mixed)*	Bardai et al., 2020 ⁵¹	n=20	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	06/10 - 07/27	Canada	15%	High
Healthcare Occupations (mixed)*	Bardai et al., 2020 ⁵¹	n=44	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	06/10 - 07/27	Canada	11%	High
Healthcare Occupations (mixed)*	Bardai et al., 2020 ⁵¹	n=99	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	06/10 - 07/27	Canada	12%	High
Healthcare Occupations (mixed)*	Biggs et al., 2020 ³	n=59	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	04/28 - 05/03	United States of America	10.17%	Moderate

Healthcare Occupations (mixed)*	Blairon et al., 2020 ⁵²	n=588	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	05/25 - 06/19	Belgium	19.2%	High
Healthcare Occupations (mixed)*	Borraz et al., 2020 ⁵³	n=289	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Prospective cohort	03/20 - 04/21	Spain	5.88%	High
Healthcare Occupations (mixed)*	Brunner et al., 2020 ⁵⁴	n=762	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	05/04 - 05/29	United States of America	4.5%	High
Healthcare Occupations (mixed)*	Brunner et al., 2020 ⁵⁴	n=764	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	05/04 - 05/29	United States of America	2%	High
Healthcare Occupations (mixed)*	Carozzi et al., 2020 ⁵⁵	n=17098	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	04/01 - 04/30	Italy	3.1%	High
Healthcare Occupations (mixed)*	Carrat et al., 2020 ⁴	n=568	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Prospective cohort	05/04 - 06/23	France	11.6% (8.3-14.4%)	Moderate
Healthcare Occupations (mixed)*	Cavlek et al., 2020 ⁵⁶	n=558	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	04/25 - 05/24	Croatia	1.25%	High

Healthcare Occupations (mixed)*	Chibwana et al., 2020 ⁵⁷	n=500	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Prospective cohort	05/22 - 06/19	Malawi	12.3% (8.2-16.5%)	High
Healthcare Occupations (mixed)*	Coffman et al., 2020 ⁵⁸	n=1100	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	07/01 - 07/31	United States of America	2.2%	Unclear
Healthcare Occupations (mixed)*	Cooper et al., 2020 ⁵⁹	n=118	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	06/10 - 08/07	The United Kingdom	8.47%	Moderate
Healthcare Occupations (mixed)*	Cooper et al., 2020 ⁵⁹	n=27	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	06/10 - 08/07	The United Kingdom	14.81%	Moderate
Healthcare Occupations (mixed)*	Cooper et al., 2020 ⁵⁹	n=24	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	06/10 - 08/07	The United Kingdom	12.5%	Moderate
Healthcare Occupations (mixed)*	Cooper et al., 2020 ⁵⁹	n=1068	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	06/10 - 08/07	The United Kingdom	5.43%	Moderate
Healthcare Occupations (mixed)*	Cooper et al., 2020 ⁵⁹	n=174	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	06/10 - 08/07	The United Kingdom	5.75%	Moderate

Healthcare Occupations (mixed)*	Cooper et al., 2020 ⁵⁹	n=319	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	06/10 - 08/07	The United Kingdom	11.29%	Moderate
Healthcare Occupations (mixed)*	Cooper et al., 2020 ⁵⁹	n=5698	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	06/10 - 08/07	The United Kingdom	7.2%	Moderate
Healthcare Occupations (mixed)*	Cooper et al., 2020 ⁵⁹	n=412	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	06/10 - 08/07	The United Kingdom	4.61%	Moderate
Healthcare Occupations (mixed)*	Denyer et al., 2020 ⁶⁰	n=5850	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	05/12 - 05/18	Japan	1.79%	Unclear
Healthcare Occupations (mixed)*	Dimeglio et al., 2020 ⁶¹	n=8758	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	06/10 - 07/10	France	3.2% (2.8-3.5%)	High
Healthcare Occupations (mixed)*	Erber et al., 2020 ³¹	n=603	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	04/14 - 05/29	Germany	2.8%	High
Healthcare Occupations (mixed)*	Fuereder et al., 2020 ⁶²	n=62	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Retrospective cohort	04/01 - 06/04	Austria	3.2% (0.4-11.2%)	High

Healthcare Occupations (mixed)*	Fusco et al., 2020 ⁶³	n=115	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	03/23 - 04/02	Italy	1.74%	High
Healthcare Occupations (mixed)*	Geraci et al., 2020 ⁶⁴	n=230	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	03/16 - 05/20	United States of America	2.17%	High
Healthcare Occupations (mixed)*	Gudo et al., 2020 ⁶⁵	n=1427	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	06/17 - 06/30	Mozambique	7% (6-9%)	High
Healthcare Occupations (mixed)*	Hackner et al., 2020 ⁶⁶	n=130	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	04/01 - 04/30	Austria	2.3%	High
Healthcare Occupations (mixed)*	Halatoko et al., 2020 ⁴¹	n=370	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	04/23 - 05/08	Togo	1.4%	High
Healthcare Occupations (mixed)*	Haq et al., 2020 ⁶⁷	n=76	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	06/15 - 06/29	Pakistan	35.5% (24.8-47.3%)	Moderate
Healthcare Occupations (mixed)*	He et al., 2020 ⁶⁸	n=1059	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Repeated cross sectional study	05/13 - 06/10	China	9.3%	High

Healthcare Occupations (mixed)*	Herzberg et al., 2020 ⁶⁹	n=871	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Prospective cohort	04/14 - 06/16	Germany	2.64%	High
Healthcare Occupations (mixed)*	Jeremias et al., 2020 ⁷⁰	n=100	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	03/01 - 04/30	United States of America	12%	High
Healthcare Occupations (mixed)*	Jespersen et al., 2020 ⁷¹	n=17948	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	05/18 - 06/19	Denmark	3.36% (2.38-3.82%)	Moderate
Healthcare Occupations (mixed)*	Kassem et al., 2020 ⁷²	n=74	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	06/01 - 06/14	Egypt	12.2%	High
Healthcare Occupations (mixed)*	Kern et al., 2020 ⁷³	n=1316	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	04/09 - 04/16	Germany	1.06% (0.58-1.78%)	High
Healthcare Occupations (mixed)*	Khalil et al., 2020 ⁷⁴	n=190	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	05/15 - 05/28	The United Kingdom	22%	High
Healthcare Occupations (mixed)*	Kumar et al., 2020 ⁷⁵	n=635	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Repeated cross sectional study	07/11 - 07/24	India	0%	High

Healthcare Occupations (mixed)*	Lackermair et al., 2020 ⁷⁶	n=151	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	04/02 - 04/06	Germany	2.6% (0.8-7.1%)	High
Healthcare Occupations (mixed)*	Lahner et al., 2020 ⁷⁷	n=1084	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	04/07 - 04/27	Italy	0.7%	High
Healthcare Occupations (mixed)*	Liu et al., 2020 ⁷⁸	n=116	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	02/07 - 04/21	China	0%	High
Healthcare Occupations (mixed)*	Liu et al., 2020 ⁷⁸	n=304	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	02/07 - 04/21	China	0%	High
Healthcare Occupations (mixed)*	Liu et al., 2020 ⁷⁹	n=3832	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	02/29 - 04/29	China	4% (3.4-4.7%)	Moderate
Healthcare Occupations (mixed)*	Lorenzo et al., 2020 ⁸⁰	n=38	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	05/02 - 05/31	Italy	5.3%	High
Healthcare Occupations (mixed)*	Mahomed et al., 2020 ⁸¹	n=569	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	08/31 - 10/12	Mozambique	0.7%	High

Healthcare Occupations (mixed)*	Mahumane et al., 2020 ⁸²	n=380	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	11/02 - 11/17	Mozambique	1.3%	High
Healthcare Occupations (mixed)*	Majdoubi et al., 2020 ⁸³	n=276	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	05/17 - 06/19	Canada	0.6% (0-2.71%)	High
Healthcare Occupations (mixed)*	Majiya et al., 2020 ⁸⁴	n=185	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	06/26 - 06/30	Nigeria	25.41%	Moderate
Healthcare Occupations (mixed)*	Majiya et al., 2020 ⁸⁴	n=43	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	06/26 - 06/30	Nigeria	37.21%	Moderate
Healthcare Occupations (mixed)*	Malfertheiner et al., 2020 ⁸⁵	n=139	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Prospective cohort	03/15 - 06/07	Germany	0%	High
Healthcare Occupations (mixed)*	Martin et al., 2020 ⁸⁶	n=326	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	04/15 - 05/18	Belgium	11%	High
Healthcare Occupations (mixed)*	Martin et al., 2020 ²³	n=4631	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	05/29 - 07/13	The United Kingdom	13.65%	Moderate

Healthcare Occupations (mixed)*	Melo et al., 2020 ⁸⁷	n=471	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	06/01 - 06/30	Brazil	13.59%	High
Healthcare Occupations (mixed)*	Morcuende et al., 2020 ⁸⁸	n=6	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	03/01 - 04/21	United States of America	0%	High
Healthcare Occupations (mixed)*	Moscola et al., 2020 ⁸⁹	n=8156	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	04/20 - 06/23	United States of America	11.6%	High
Healthcare Occupations (mixed)*	Nishida et al., 2020 ⁹⁰	n=49	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	06/12 - 06/19	Japan	0%	Moderate
Healthcare Occupations (mixed)*	Olalla et al., 2020 ⁹¹	n=498	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	04/15 - 04/25	Spain	2.2%	High
Healthcare Occupations (mixed)*	Pallett et al., 2020 ⁹²	n=504	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Prospective cohort	04/08 - 06/12	The United Kingdom	10.6% (7.6-13.6%)	High
Healthcare Occupations (mixed)*	Pere et al., 2020 ⁹³	n=3569	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	05/02 - 06/26	France	11.9%	High

Healthcare Occupations (mixed)*	Poulikakos et al., 2020 ⁹⁴	n=281	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	05/04 - 05/06	The United Kingdom	6%	High
Healthcare Occupations (mixed)*	Psichogiou et al., 2020 ⁹⁵	n=1495	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	04/13 - 05/15	Greece	1.26% (0.43-3.26%)	Moderate
Healthcare Occupations (mixed)*	Satpati et al., 2020 ²⁷	n=18	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	07/26 - 08/08	India	5.56%	Moderate
Healthcare Occupations (mixed)*	Seetharam et al., 2020 ⁹⁶	n=728	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	08/16 - 08/29	India	27.3% (24.1-30.6%)	Unclear
Healthcare Occupations (mixed)*	Shakiba et al., 2020 ¹⁰	n=43	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	04/11 - 04/19	Iran (Islamic Republic of)	14.5% (4.5-25%)	Moderate
Healthcare Occupations (mixed)*	Shields et al., 2020 ⁹⁷	n=516	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	04/24 - 04/25	The United Kingdom	24.4%	High
Healthcare Occupations (mixed)*	Silva et al., 2020 ⁹⁸	n=61	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	04/09 - 04/29	Brazil	4.91%	High

Healthcare Occupations (mixed)*	Solodky et al., 2020 ⁹⁹	n=85	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	03/01 - 04/16	France	5.88%	High
Healthcare Occupations (mixed)*	Soriano et al., 2020 ¹⁰⁰	n=108	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Retrospective cohort	04/26 - 05/16	Spain	13%	High
Healthcare Occupations (mixed)*	Statistica et al., 2020 ¹⁰¹	n=64660	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	05/25 - 07/15	Italy	2.5%	Unclear
Healthcare Occupations (mixed)*	Steensels et al., 2020 ¹⁰²	n=3056	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	04/22 - 04/30	Belgium	6.4% (5.5-7.3%)	High
Healthcare Occupations (mixed)*	Stock et al., 2020 ¹⁰³	n=98	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	04/04 - 04/20	United States of America	15.3%	High
Healthcare Occupations (mixed)*	Takita et al., 2020 ¹⁰⁴	n=175	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	04/20 - 05/20	Japan	4% (1.62-8.07%)	High
Healthcare Occupations (mixed)*	Tong et al., 2020 ¹⁰⁵	n=191	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	05/12 - 05/15	China	0%	High

Healthcare Occupations (mixed)*	Trieu et al., 2020 ¹⁰⁶	n=607	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Prospective cohort	03/06 - 04/09	Norway	5.27%	High
Healthcare Occupations (mixed)*	Tu et al., 2020 ¹⁰⁷	n=325	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross sectional study with prospective cohort follow up of a subset of the sample	03/19 - 03/20	China	43.08%	High
Healthcare Occupations (mixed)*	Valdivia et al., 2020 ¹⁰⁸	n=1153	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	04/13 - 04/30	Spain	3.5%	High
Healthcare Occupations (mixed)*	Vasquez et al., 2020 ¹⁰⁹	n=1147	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	05/19 - 06/06	Peru	58.3%	High
Healthcare Occupations (mixed)*	Viegas et al., 2020 ¹¹⁰	n=1443	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	08/03 - 08/21	Mozambique	2.63%	High
Healthcare Occupations (mixed)*	Vlachoyiannopoulou et al., 2020 ¹¹¹	n=321	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	04/25 - 05/10	Greece	2.18%	High
Healthcare Occupations (mixed)*	Volta et al., 2020 ¹¹²	n=76	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	04/27 - 04/27	Italy	11.8%	High

Healthcare Occupations (mixed)*	Ward et al., 2020 ¹¹³	n=5416	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	09/15 - 09/28	The United Kingdom	10.67%	Moderate
Healthcare Occupations (mixed)*	Ward et al., 2020 ¹¹³	n=1692	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	09/15 - 09/28	The United Kingdom	6.68%	Moderate
Healthcare Occupations (mixed)*	Xiong et al., 2020 ¹¹⁴	n=797	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	02/12 - 03/17	China	4.39%	Unclear
Healthcare Occupations (mixed)*	Zhang et al., 2020 ¹¹⁵	n=63	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	01/21 - 02/16	China	0%	High
Healthcare Occupations (mixed)*	Zhao et al., 2020 ¹¹⁶	n=1060	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	01/14 - 02/21	China	8.3%	High
First responders (mixed)*	Ahmad et al., 2020 ¹¹⁷	n=40	Healthcare Practitioners and Technical Occupations and Protective Service Occupations (i.e. first responders)*	Cross-sectional survey	04/21 - 05/22	United States of America	20%	High
First responders (mixed)*	Halbrook et al., 2020 ¹¹⁸	n=679	Healthcare Practitioners and Technical Occupations and Protective Service Occupations (i.e. first responders)*	Cross-sectional survey	05/19 - 08/31	United States of America	8.1%	Moderate

1 2 3 4 5 6 7 8 9	First responders (mixed)*	Iwuji et al., 2020 ¹¹⁹	n=683	Healthcare Practitioners and Technical Occupations and Protective Service Occupations (i.e. first responders)*	Cross-sectional survey	05/12 - 05/13	United States of America	0.7%	High
10 11 12 13 14 15	First responders (mixed)*	Magyar et al., 2020 ¹²⁰	n=70	Healthcare Practitioners and Technical Occupations and Protective Service Occupations (i.e. first responders)*	Cross-sectional survey	05/01 - 05/14	United States of America	4.29%	High
16 17 18 19 20 21	First responders (mixed)*	Martinez et al., 2020 ¹²¹	n=79	Healthcare Practitioners and Technical Occupations and Protective Service Occupations (i.e. first responders)*	Cross-sectional survey	04/16 - 04/17	United States of America	5.06%	High
22 23 24 25 26 27	First responders (mixed)*	Staletovich et al., 2020 ¹²²	n=359	Healthcare Practitioners and Technical Occupations and Protective Service Occupations (i.e. first responders)*	Cross-sectional survey	05/17 - 05/22	United States of America	0%	Unclear
28 29 30 31 32	Healthcare Practitioners and Technical Occupations (29-0000)	Hibino et al., 2020 ¹²³	n=806	Health Diagnosing and Treating Practitioners	Cross-sectional survey	06/01 - 07/30	Japan	0.74% (0.27-1.61%)	Unclear
33 34 35 36 37	Healthcare Practitioners and Technical Occupations (29-0000)	Jones et al., 2020 ²⁹	n=856	Dentists, General	Cross-sectional survey	01/15 - 06/15	The United Kingdom	7.9%	High
38 39 40 41 42 43 44 45 46 47	Life, Physical, and Social Science	Calcagno et al., 2020 ¹²⁴	n=343	Life, Physical, and Social Science Occupations	Cross-sectional survey	04/17 - 05/20	Italy	6.71%	Moderate

Occupations (19-0000)								
Healthcare Practitioners and Technical Occupations (29-0000)	Goenka et al., 2020 ²⁵	n=49	Dietitians and Nutritionists	Cross-sectional survey	07/12 - 08/23	India	18.37%	Moderate
Healthcare Practitioners and Technical Occupations (29-0000)	Goenka et al., 2020 ²⁶	n=6	Dietitians and Nutritionists	Cross-sectional survey	08/01 - 08/31	India	0%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Akinbami et al., 2020 ⁴⁶	n=321	Pharmacists	Cross-sectional survey	05/18 - 06/13	United States of America	4.4% (2.4-7.2%)	Moderate
Healthcare Practitioners and Technical Occupations (29-0000)	Alharbi et al., 2020 ¹²⁵	n=5	Pharmacists	Cross-sectional survey	04/18 - 06/17	Saudi Arabia	0%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Calcagno et al., 2020 ¹²⁴	n=29	Pharmacists	Cross-sectional survey	04/17 - 05/20	Italy	3.45%	Moderate
Healthcare Practitioners and Technical Occupations (29-0000)	Chau et al., 2020 ¹²⁶	n=17	Pharmacists	Cross-sectional survey	08/23 - 08/30	Viet Nam	0%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Hanrath et al., 2020 ³²	n=189	Pharmacists	Cross-sectional survey	05/29 - 07/06	The United Kingdom	4.76%	High

Healthcare Practitioners and Technical Occupations (29-0000)	Khan et al., 2020 ¹²⁷	n=109	Pharmacists	Cross-sectional survey	06/15 - 06/29	India	0%	Moderate
Healthcare Practitioners and Technical Occupations (29-0000)	Mahomed et al., 2020 ⁸¹	n=404	Pharmacists	Cross-sectional survey	08/31 - 10/12	Mozambique	0.5%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Martin et al., 2020 ²³	n=113	Pharmacists	Cross-sectional survey	05/29 - 07/13	The United Kingdom	0%	Moderate
Healthcare Practitioners and Technical Occupations (29-0000)	Rosser et al., 2020 ³³	n=213	Pharmacists	Cross-sectional survey	04/20 - 05/20	United States of America	1.88%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Costa et al., 2020 ¹²⁸	n=652	Physicians and Surgeons	Cross-sectional survey	05/14 - 05/28	Brazil	5.8%	Moderate
Healthcare Practitioners and Technical Occupations (29-0000)	Mohr et al., 2020 ¹²⁹	n=372	Physicians and Surgeons	Cross-sectional survey	05/13 - 07/08	United States of America	1.61%	Moderate
Healthcare Practitioners and Technical Occupations (29-0000)	Nishida et al., 2020 ⁹⁰	n=63	Physicians and Surgeons	Cross-sectional survey	06/12 - 06/19	Japan	3.2% (0.88-11%)	Moderate
Healthcare Practitioners and	Noor et al., 2020 ¹³⁰	n=157	Physicians and Surgeons	Cross-sectional survey	07/13 - 07/15	Pakistan	17.83%	Moderate

1	Technical Occupations (29-0000)								
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4	Healthcare Practitioners and Technical Occupations (29-0000)	Singhal et al., 2020 ¹³¹	n=208	Physicians and Surgeons	Cross-sectional survey	06/01 - 06/30	India	12.5%	High
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7	Healthcare Practitioners and Technical Occupations (29-0000)	Morcuende et al., 2020 ⁸⁸	n=23	Anesthesiologists	Cross-sectional survey	03/01 - 04/21	United States of America	13.04%	High
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11	Healthcare Practitioners and Technical Occupations (29-0000)	Morcuende et al., 2020 ⁸⁸	n=3	Obstetricians and Gynecologists	Cross-sectional survey	03/01 - 04/21	United States of America	100%	High
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17	Healthcare Practitioners and Technical Occupations (29-0000)	Urbieto et al., 2020 ¹³²	n=23	Pediatricians, General	Cross-sectional survey	04/14 - 04/16	Spain	4.3%	High
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22	Healthcare Practitioners and Technical Occupations (29-0000)	Iversen et al., 2020 ⁸	n=1944	Psychiatrists	Cross-sectional survey	04/15 - 04/22	Denmark	1.85%	Low
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27	Healthcare Practitioners and Technical Occupations (29-0000)	Leidner et al., 2020 ²²	n=301	Surgeons	Cross sectional study with prospective cohort follow up of a subset of the sample	04/08 - 05/22	United States of America	2.66%	High
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33	Healthcare Practitioners and Technical Occupations (29-0000)	Akinbami et al., 2020 ⁴⁶	n=2297	Physicians and Surgeons, All Other	Cross-sectional survey	05/18 - 06/13	United States of America	6.1% (5.1-7.1%)	Moderate
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Occupations (29-0000)								
Healthcare Practitioners and Technical Occupations (29-0000)	Alharbi et al., 2020 ¹²⁵	n=18	Physicians and Surgeons, All Other	Cross-sectional survey	04/18 - 06/17	Saudi Arabia	27.78%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Amendola et al., 2020 ⁴⁷	n=214	Physicians and Surgeons, All Other	Cross-sectional survey	04/15 - 04/15	Italy	4.67%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Baracco et al., 2020 ²⁴	n=417	Physicians and Surgeons, All Other	Cross-sectional survey	04/23 - 05/05	Italy	17%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Barallat et al., 2020 ⁵⁰	n=1821	Physicians and Surgeons, All Other	Cross-sectional survey	05/04 - 05/22	Spain	11.81%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Bianchi et al., 2020 ¹³³	n=34	Physicians and Surgeons, All Other	Cross-sectional survey	04/15 - 05/15	Italy	5.88%	Unclear
Healthcare Practitioners and Technical Occupations (29-0000)	Blairon et al., 2020 ⁵²	n=323	Physicians and Surgeons, All Other	Cross-sectional survey	05/25 - 06/19	Belgium	11.8%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Brehm et al., 2020 ⁷	n=275	Physicians and Surgeons, All Other	Cross sectional study with prospective cohort follow up of a	03/20 - 07/17	Germany	3.3%	Moderate

				subset of the sample				
Healthcare Practitioners and Technical Occupations (29-0000)	Brousseau et al., 2020 ¹³⁴	n=432	Physicians and Surgeons, All Other	Cross-sectional survey	07/06 - 09/24	Canada	7.2%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Calcagno et al., 2020 ¹²⁴	n=700	Physicians and Surgeons, All Other	Cross-sectional survey	04/17 - 05/20	Italy	7.86%	Moderate
Healthcare Practitioners and Technical Occupations (29-0000)	Chau et al., 2020 ¹²⁶	n=64	Physicians and Surgeons, All Other	Cross-sectional survey	08/23 - 08/30	Viet Nam	0%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Chen et al., 2020 ¹³⁵	n=17	Physicians and Surgeons, All Other	Cross-sectional survey	02/19 - 02/19	China	41.18%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Erber et al., 2020 ³¹	n=860	Physicians and Surgeons, All Other	Cross-sectional survey	04/14 - 05/29	Germany	1.63%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Favara et al., 2020 ¹³⁶	n=15	Physicians and Surgeons, All Other	Prospective cohort	06/01 - 06/07	The United Kingdom	13.33%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Favara et al., 2020 ¹⁹	n=82	Physicians and Surgeons, All Other	Cross-sectional survey	07/13 - 07/13	The United Kingdom	10.9%	High

Healthcare Practitioners and Technical Occupations (29-0000)	Fujita et al., 2020 ¹³⁷	n=42	Physicians and Surgeons, All Other	Cross-sectional survey	04/10 - 04/20	Japan	4.7%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Galan et al., 2020 ²⁰	n=564	Physicians and Surgeons, All Other	Cross-sectional survey	04/14 - 04/27	Spain	39.36%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Godbout et al., 2020 ¹³⁸	n=490	Physicians and Surgeons, All Other	Cross-sectional survey	07/27 - 10/02	United States of America	1.43%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Goenka et al., 2020 ²⁵	n=255	Physicians and Surgeons, All Other	Cross-sectional survey	07/12 - 08/23	India	3.92%	Moderate
Healthcare Practitioners and Technical Occupations (29-0000)	Goenka et al., 2020 ²⁶	n=29	Physicians and Surgeons, All Other	Cross-sectional survey	08/01 - 08/31	India	20.69%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Hanrath et al., 2020 ³²	n=899	Physicians and Surgeons, All Other	Cross-sectional survey	05/29 - 07/06	The United Kingdom	7.01%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Houlihan et al., 2020 ¹³⁹	n=72	Physicians and Surgeons, All Other	Cross-sectional survey	03/26 - 04/08	The United Kingdom	22%	High
Healthcare Practitioners and	Hunter et al., 2020 ²¹	n=279	Physicians and Surgeons, All Other	Cross-sectional survey	04/29 - 05/08	United States of America	1.08%	High

1	Technical Occupations (29-0000)								
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4	Healthcare Practitioners and Technical Occupations (29-0000)	Insua et al., 2020 ¹⁴⁰	n=116	Physicians and Surgeons, All Other	Cross-sectional survey	06/08 - 06/09	Argentina	0.9% (0.1-5.5%)	High
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7	Healthcare Practitioners and Technical Occupations (29-0000)	Iversen et al., 2020 ⁸	n=4698	Physicians and Surgeons, All Other	Cross-sectional survey	04/15 - 04/22	Denmark	4.07%	Low
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11	Healthcare Practitioners and Technical Occupations (29-0000)	Iversen et al., 2020 ⁸	n=113	Physicians and Surgeons, All Other	Cross-sectional survey	04/15 - 04/22	Denmark	7.08%	Low
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17	Healthcare Practitioners and Technical Occupations (29-0000)	Jeremias et al., 2020 ⁷⁰	n=79	Physicians and Surgeons, All Other	Cross-sectional survey	03/01 - 04/30	United States of America	11.4%	High
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22	Healthcare Practitioners and Technical Occupations (29-0000)	Kassem et al., 2020 ⁷²	n=30	Physicians and Surgeons, All Other	Cross-sectional survey	06/01 - 06/14	Egypt	6.66%	High
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27	Healthcare Practitioners and Technical Occupations (29-0000)	Kassem et al., 2020 ⁷²	n=30	Physicians and Surgeons, All Other	Cross-sectional survey	06/01 - 06/14	Egypt	3.33%	High
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32	Healthcare Practitioners and Technical Occupations (29-0000)	Kassem et al., 2020 ⁷²	n=30	Physicians and Surgeons, All Other	Cross-sectional survey	06/01 - 06/14	Egypt	0%	High
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37	Healthcare Practitioners and Technical Occupations (29-0000)	Kassem et al., 2020 ⁷²	n=30	Physicians and Surgeons, All Other	Cross-sectional survey	06/01 - 06/14	Egypt	0%	High
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Occupations (29-0000)								
Healthcare Practitioners and Technical Occupations (29-0000)	Kassem et al., 2020 ⁷²	n=30	Physicians and Surgeons, All Other	Cross-sectional survey	06/01 - 06/14	Egypt	3.33%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Khan et al., 2020 ¹²⁷	n=980	Physicians and Surgeons, All Other	Cross-sectional survey	06/15 - 06/29	India	2.8% (1.9-4%)	Moderate
Healthcare Practitioners and Technical Occupations (29-0000)	Kohler et al., 2020 ¹⁴¹	n=268	Physicians and Surgeons, All Other	Cross-sectional survey	03/19 - 04/03	Switzerland	1.49%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Kumar et al., 2020 ¹⁴²	n=201	Physicians and Surgeons, All Other	Cross-sectional survey	06/01 - 06/30	India	7% (4.2-11.4%)	High
Healthcare Practitioners and Technical Occupations (29-0000)	Leidner et al., 2020 ²²	n=1081	Physicians and Surgeons, All Other	Cross sectional study with prospective cohort follow up of a subset of the sample	04/08 - 05/22	United States of America	3.33%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Lumley et al., 2020 ⁹	n=1859	Physicians and Surgeons, All Other	Prospective cohort	04/23 - 11/30	The United Kingdom	10.11%	Moderate
Healthcare Practitioners and Technical	Martin et al., 2020 ²³	n=1243	Physicians and Surgeons, All Other	Cross-sectional survey	05/29 - 07/13	The United Kingdom	10.3%	Moderate

Occupations (29-0000)								
Healthcare Practitioners and Technical Occupations (29-0000)	Mesnil et al., 2020 ¹⁴³	n=111	Physicians and Surgeons, All Other	Cross-sectional survey	06/08 - 06/22	France	11%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Missaglia et al., 2020 ¹⁴⁴	n=377	Physicians and Surgeons, All Other	Cross-sectional survey	04/01 - 04/30	Italy	14.9%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Mohr et al., 2020 ¹²⁹	n=272	Physicians and Surgeons, All Other	Cross-sectional survey	05/13 - 07/08	United States of America	2.94%	Moderate
Healthcare Practitioners and Technical Occupations (29-0000)	Moscola et al., 2020 ⁸⁹	n=3746	Physicians and Surgeons, All Other	Cross-sectional survey	04/20 - 06/23	United States of America	8.7%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Nishida et al., 2020 ⁹⁰	n=149	Physicians and Surgeons, All Other	Cross-sectional survey	06/12 - 06/19	Japan	1.3% (0.37-4.8%)	Moderate
Healthcare Practitioners and Technical Occupations (29-0000)	Nishida et al., 2020 ⁹⁰	n=46	Physicians and Surgeons, All Other	Cross-sectional survey	06/12 - 06/19	Japan	0%	Moderate
Healthcare Practitioners and Technical Occupations (29-0000)	Nishida et al., 2020 ⁹⁰	n=40	Physicians and Surgeons, All Other	Cross-sectional survey	06/12 - 06/19	Japan	0%	Moderate

Healthcare Practitioners and Technical Occupations (29-0000)	Nishida et al., 2020 ⁹⁰	n=59	Physicians and Surgeons, All Other	Cross-sectional survey	06/12 - 06/19	Japan	1.7% (0.3-9%)	Moderate
Healthcare Practitioners and Technical Occupations (29-0000)	Nishida et al., 2020 ⁹⁰	n=925	Physicians and Surgeons, All Other	Cross-sectional survey	06/12 - 06/19	Japan	0.43% (0.17-1.1%)	Moderate
Healthcare Practitioners and Technical Occupations (29-0000)	Noor et al., 2020 ¹³⁰	n=303	Physicians and Surgeons, All Other	Cross-sectional survey	07/13 - 07/15	Pakistan	19.8%	Moderate
Healthcare Practitioners and Technical Occupations (29-0000)	Orth-Holler et al., 2020 ¹⁴⁵	n=377	Physicians and Surgeons, All Other	Cross-sectional survey	03/20 - 03/27	Austria	0.3% (0.01-1.5%)	High
Healthcare Practitioners and Technical Occupations (29-0000)	Plebani et al., 2020 ¹⁴⁶	n=2337	Physicians and Surgeons, All Other	Cross-sectional survey	02/22 - 05/29	Italy	3.6% (2.8-4.4%)	High
Healthcare Practitioners and Technical Occupations (29-0000)	Rosser et al., 2020 ³³	n=2533	Physicians and Surgeons, All Other	Cross-sectional survey	04/20 - 05/20	United States of America	1.07%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Rudberg et al., 2020 ¹⁴⁷	n=439	Physicians and Surgeons, All Other	Cross-sectional survey	04/14 - 05/08	Sweden	19.1%	Moderate
Healthcare Practitioners and	Schmidt et al., 2020 ¹⁴⁸	n=34	Physicians and Surgeons, All Other	Cross-sectional survey	04/20 - 04/30	Germany	8.82%	High

Technical Occupations (29-0000)								
Healthcare Practitioners and Technical Occupations (29-0000)	Sotgiu et al., 2020 ¹⁴⁹	n=115	Physicians and Surgeons, All Other	Cross-sectional survey	04/02 - 04/16	Italy	6.09%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Venugopal et al., 2020 ¹⁵⁰	n=157	Physicians and Surgeons, All Other	Cross-sectional survey	03/01 - 05/01	United States of America	25%	Moderate
Healthcare Practitioners and Technical Occupations (29-0000)	Yogo et al., 2020 ³⁶	n=110	Physicians and Surgeons, All Other	Cross-sectional survey	05/20 - 06/08	United States of America	1.82%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Brzostek et al., 2020 ¹⁵¹	n=998	Physician Assistants	Cross-sectional survey	04/17 - 05/07	United States of America	28.3%	Moderate
Healthcare Practitioners and Technical Occupations (29-0000)	Hoffmann et al., 2020 ¹⁵²	n=156	Physician Assistants	Prospective cohort	07/01 - 07/31	Germany	1.3%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Mohr et al., 2020 ¹²⁹	n=156	Physician Assistants	Cross-sectional survey	05/13 - 07/08	United States of America	0.64%	Moderate
Healthcare Practitioners and Technical	Morcuende et al., 2020 ⁸⁸	n=6	Physician Assistants	Cross-sectional survey	03/01 - 04/21	United States of America	9.43%	High

Occupations (29-0000)								
Healthcare Practitioners and Technical Occupations (29-0000)	Morcuende et al., 2020 ⁸⁸	n=53	Physician Assistants	Cross-sectional survey	03/01 - 04/21	United States of America	9.43%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Patel et al., 2020 ¹⁵³	n=230	Physician Assistants	Prospective cohort	06/02 - 06/27	United States of America	3.48%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Self et al., 2020 ¹⁵⁴	n=919	Physician Assistants	Cross-sectional survey	04/03 - 06/19	United States of America	5.66%	Moderate
Healthcare Practitioners and Technical Occupations (29-0000)	Shah et al., 2020 ¹⁵⁵	n=248	Physician Assistants	Cross-sectional survey	05/25 - 07/09	United States of America	0%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Shah et al., 2020 ¹⁵⁵	n=320	Physician Assistants	Cross-sectional survey	05/25 - 07/09	United States of America	0.63%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Lumley et al., 2020 ⁹	n=386	Occupational Therapists	Prospective cohort	04/23 - 11/30	The United Kingdom	11.4%	Moderate
Healthcare Practitioners and Technical Occupations (29-0000)	Akinbami et al., 2020 ⁴⁶	n=235	Physical Therapists	Cross-sectional survey	05/18 - 06/13	United States of America	10.6% (7-15.3%)	Moderate

Healthcare Practitioners and Technical Occupations (29-0000)	Brehm et al., 2020 ⁷	n=15	Physical Therapists	Cross sectional study with prospective cohort follow up of a subset of the sample	03/20 - 07/17	Germany	0%	Moderate
Healthcare Practitioners and Technical Occupations (29-0000)	Cooper et al., 2020 ⁵⁹	n=84	Physical Therapists	Cross-sectional survey	06/10 - 08/07	The United Kingdom	10.71%	Moderate
Healthcare Practitioners and Technical Occupations (29-0000)	Costa et al., 2020 ¹²⁸	n=159	Physical Therapists	Cross-sectional survey	05/14 - 05/28	Brazil	10.7%	Moderate
Healthcare Practitioners and Technical Occupations (29-0000)	Akinbami et al., 2020 ⁴⁶	n=409	Respiratory Therapists	Cross-sectional survey	05/18 - 06/13	United States of America	8.3% (5.8-11.4%)	Moderate
Healthcare Practitioners and Technical Occupations (29-0000)	Brunner et al., 2020 ⁵⁴	n=42	Respiratory Therapists	Cross-sectional survey	05/04 - 05/29	United States of America	0%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Godbout et al., 2020 ¹³⁸	n=25	Respiratory Therapists	Cross-sectional survey	07/27 - 10/02	United States of America	0%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Hunter et al., 2020 ²¹	n=94	Respiratory Therapists	Cross-sectional survey	04/29 - 05/08	United States of America	0%	High

Healthcare Practitioners and Technical Occupations (29-0000)	Rosser et al., 2020 ³³	n=135	Respiratory Therapists	Cross-sectional survey	04/20 - 05/20	United States of America	0%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Self et al., 2020 ¹⁵⁴	n=235	Respiratory Therapists	Cross-sectional survey	04/03 - 06/19	United States of America	4.26%	Moderate
Healthcare Practitioners and Technical Occupations (29-0000)	Yogo et al., 2020 ³⁶	n=121	Respiratory Therapists	Cross-sectional survey	05/20 - 06/08	United States of America	0%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Rosser et al., 2020 ³³	n=253	Therapists, All Other	Cross-sectional survey	04/20 - 05/20	United States of America	1.58%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Schmidt et al., 2020 ¹⁴⁸	n=80	Therapists, All Other	Cross-sectional survey	04/20 - 04/30	Germany	3.75%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Yogo et al., 2020 ³⁶	n=22	Therapists, All Other	Cross-sectional survey	05/20 - 06/08	United States of America	4.55%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Calcagno et al., 2020 ¹²⁴	n=13	Veterinarians	Cross-sectional survey	04/17 - 05/20	Italy	0%	Moderate
Healthcare Practitioners and	Akinbami et al., 2020 ⁴⁶	n=6426	Registered Nurses	Cross-sectional survey	05/18 - 06/13	United States of America	7.7% (7.1-8.4%)	Moderate

Technical Occupations (29-0000)								
Healthcare Practitioners and Technical Occupations (29-0000)	Alharbi et al., 2020 ¹²⁵	n=70	Registered Nurses	Cross-sectional survey	04/18 - 06/17	Saudi Arabia	10%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Alharbi et al., 2020 ¹²⁵	n=9	Registered Nurses	Cross-sectional survey	04/18 - 06/17	Saudi Arabia	33.33%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Alharbi et al., 2020 ¹²⁵	n=76	Registered Nurses	Cross-sectional survey	04/18 - 06/17	Saudi Arabia	26.32%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Alharbi et al., 2020 ¹²⁵	n=21	Registered Nurses	Cross-sectional survey	04/18 - 06/17	Saudi Arabia	14.29%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Alharbi et al., 2020 ¹²⁵	n=43	Registered Nurses	Cross-sectional survey	04/18 - 06/17	Saudi Arabia	27.91%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Amendola et al., 2020 ⁴⁷	n=216	Registered Nurses	Cross-sectional survey	04/15 - 04/15	Italy	6.02%	High
Healthcare Practitioners and Technical	Bampoe et al., 2020 ¹⁵⁶	n=52	Registered Nurses	Cross-sectional survey	05/11 - 06/05	The United Kingdom	13.5% (5.6-25.8%)	High

Occupations (29-0000)								
Healthcare Practitioners and Technical Occupations (29-0000)	Bampoe et al., 2020 ¹⁵⁶	n=40	Registered Nurses	Cross-sectional survey	05/11 - 06/05	The United Kingdom	12.5% (4.2-26.8%)	High
Healthcare Practitioners and Technical Occupations (29-0000)	Baracco et al., 2020 ²⁴	n=1014	Registered Nurses	Cross-sectional survey	04/23 - 05/05	Italy	17.9%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Barallat et al., 2020 ⁵⁰	n=2243	Registered Nurses	Cross-sectional survey	05/04 - 05/22	Spain	10.64%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Brehm et al., 2020 ⁷	n=444	Registered Nurses	Cross sectional study with prospective cohort follow up of a subset of the sample	03/20 - 07/17	Germany	2.3%	Moderate
Healthcare Practitioners and Technical Occupations (29-0000)	Brousseau et al., 2020 ¹³⁴	n=1189	Registered Nurses	Cross-sectional survey	07/06 - 09/24	Canada	11.9%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Calcagno et al., 2020 ¹²⁴	n=1833	Registered Nurses	Cross-sectional survey	04/17 - 05/20	Italy	8.18%	Moderate
Healthcare Practitioners and Technical	Chau et al., 2020 ¹²⁶	n=144	Registered Nurses	Cross-sectional survey	08/23 - 08/30	Viet Nam	0%	High

Occupations (29-0000)								
Healthcare Practitioners and Technical Occupations (29-0000)	Chen et al., 2020 ¹³⁵	n=25	Registered Nurses	Cross-sectional survey	02/19 - 02/19	China	8%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Cooper et al., 2020 ⁵⁹	n=3471	Registered Nurses	Cross-sectional survey	06/10 - 08/07	The United Kingdom	7.52%	Moderate
Healthcare Practitioners and Technical Occupations (29-0000)	Costa et al., 2020 ¹²⁸	n=370	Registered Nurses	Cross-sectional survey	05/14 - 05/28	Brazil	11.4%	Moderate
Healthcare Practitioners and Technical Occupations (29-0000)	Dimcheff et al., 2020 ¹⁵⁷	n=412	Registered Nurses	Cross-sectional survey	06/08 - 07/08	United States of America	7%	Moderate
Healthcare Practitioners and Technical Occupations (29-0000)	Erber et al., 2020 ³¹	n=958	Registered Nurses	Cross-sectional survey	04/14 - 05/29	Germany	2.5%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Favara et al., 2020 ¹³⁶	n=45	Registered Nurses	Prospective cohort	06/01 - 06/07	The United Kingdom	28.89%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Favara et al., 2020 ¹⁹	n=237	Registered Nurses	Cross-sectional survey	07/13 - 07/13	The United Kingdom	16.5%	High

Healthcare Practitioners and Technical Occupations (29-0000)	Finkenzeller et al., 2020 ¹⁵⁸	n=251	Registered Nurses	Prospective cohort	06/29 - 07/29	Germany	12%	Moderate
Healthcare Practitioners and Technical Occupations (29-0000)	Finkenzeller et al., 2020 ¹⁵⁸	n=887	Registered Nurses	Prospective cohort	06/29 - 07/29	Germany	20%	Moderate
Healthcare Practitioners and Technical Occupations (29-0000)	Fujita et al., 2020 ¹³⁷	n=50	Registered Nurses	Cross-sectional survey	04/10 - 04/20	Japan	6%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Galan et al., 2020 ²⁰	n=687	Registered Nurses	Cross-sectional survey	04/14 - 04/27	Spain	30.71%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Godbout et al., 2020 ¹³⁸	n=937	Registered Nurses	Cross-sectional survey	07/27 - 10/02	United States of America	1.39%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Goenka et al., 2020 ²⁵	n=224	Registered Nurses	Cross-sectional survey	07/12 - 08/23	India	9.38%	Moderate
Healthcare Practitioners and Technical Occupations (29-0000)	Goenka et al., 2020 ²⁶	n=43	Registered Nurses	Cross-sectional survey	08/01 - 08/31	India	34.88%	High
Healthcare Practitioners and	Grant et al., 2020 ¹⁵⁹	n=1345	Registered Nurses	Cross-sectional survey	05/15 - 06/05	The United Kingdom	34.7%	High

Technical Occupations (29-0000)								
Healthcare Practitioners and Technical Occupations (29-0000)	Grant et al., 2020 ¹⁵⁹	n=108	Registered Nurses	Cross-sectional survey	05/15 - 06/05	The United Kingdom	25%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Hanrath et al., 2020 ³²	n=749	Registered Nurses	Cross-sectional survey	05/29 - 07/06	The United Kingdom	8.99%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Haq et al., 2020 ⁶⁷	n=209	Registered Nurses	Cross-sectional survey	06/15 - 06/29	Pakistan	38.8% (32.1-45.7%)	Moderate
Healthcare Practitioners and Technical Occupations (29-0000)	Houlihan et al., 2020 ¹³⁹	n=106	Registered Nurses	Cross-sectional survey	03/26 - 04/08	The United Kingdom	24%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Houlihan et al., 2020 ¹³⁹	n=22	Registered Nurses	Cross-sectional survey	03/26 - 04/08	The United Kingdom	23%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Hunter et al., 2020 ²¹	n=317	Registered Nurses	Cross-sectional survey	04/29 - 05/08	United States of America	2.2%	High
Healthcare Practitioners and Technical	Iversen et al., 2020 ⁸	n=9963	Registered Nurses	Cross-sectional survey	04/15 - 04/22	Denmark	4.03%	Low

Occupations (29-0000)								
Healthcare Practitioners and Technical Occupations (29-0000)	Iversen et al., 2020 ⁸	n=1786	Registered Nurses	Cross-sectional survey	04/15 - 04/22	Denmark	4.65%	Low
Healthcare Practitioners and Technical Occupations (29-0000)	Jeremias et al., 2020 ⁷⁰	n=1043	Registered Nurses	Cross-sectional survey	03/01 - 04/30	United States of America	9.5%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Jones et al., 2020 ²⁹	n=1962	Registered Nurses	Cross-sectional survey	01/15 - 06/15	The United Kingdom	10.5%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Kassem et al., 2020 ⁷²	n=28	Registered Nurses	Cross-sectional survey	06/01 - 06/14	Egypt	10.71%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Kassem et al., 2020 ⁷²	n=28	Registered Nurses	Cross-sectional survey	06/01 - 06/14	Egypt	7.14%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Kassem et al., 2020 ⁷²	n=28	Registered Nurses	Cross-sectional survey	06/01 - 06/14	Egypt	3.57%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Kassem et al., 2020 ⁷²	n=28	Registered Nurses	Cross-sectional survey	06/01 - 06/14	Egypt	0%	High

Healthcare Practitioners and Technical Occupations (29-0000)	Khan et al., 2020 ¹²⁷	n=321	Registered Nurses	Cross-sectional survey	06/15 - 06/29	India	2.8% (1.5-5.3%)	Moderate
Healthcare Practitioners and Technical Occupations (29-0000)	Kohler et al., 2020 ¹⁴¹	n=398	Registered Nurses	Cross-sectional survey	03/19 - 04/03	Switzerland	0.75%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Kumar et al., 2020 ¹⁴²	n=308	Registered Nurses	Cross-sectional survey	06/01 - 06/30	India	6.8% (4.5-10.2%)	High
Healthcare Practitioners and Technical Occupations (29-0000)	Leidner et al., 2020 ²²	n=110	Registered Nurses	Cross sectional study with prospective cohort follow up of a subset of the sample	04/08 - 05/22	United States of America	0%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Leidner et al., 2020 ²²	n=3504	Registered Nurses	Cross sectional study with prospective cohort follow up of a subset of the sample	04/08 - 05/22	United States of America	2.34%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Lumley et al., 2020 ⁹	n=4528	Registered Nurses	Prospective cohort	04/23 - 11/30	The United Kingdom	13.21%	Moderate
Healthcare Practitioners and Technical Occupations (29-0000)	Mansour et al., 2020 ¹⁶⁰	n=285	Registered Nurses	Cross-sectional survey	03/24 - 04/04	United States of America	32.63%	High

1 2 3 4 5 6 7 8	Healthcare Practitioners and Technical Occupations (29-0000)	Martin et al., 2020 ¹⁶¹	n=580	Registered Nurses	Cross-sectional survey	04/01 - 04/15	Spain	5.52%	High
9 10 11 12 13	Healthcare Practitioners and Technical Occupations (29-0000)	Martin et al., 2020 ¹⁶¹	n=74	Registered Nurses	Cross-sectional survey	04/01 - 04/15	Spain	9.46%	High
14 15 16 17 18	Healthcare Practitioners and Technical Occupations (29-0000)	Martin et al., 2020 ¹⁶¹	n=676	Registered Nurses	Cross-sectional survey	04/01 - 04/15	Spain	5.92%	High
19 20 21 22 23	Healthcare Practitioners and Technical Occupations (29-0000)	Martin et al., 2020 ¹⁶¹	n=337	Registered Nurses	Cross-sectional survey	04/01 - 04/15	Spain	5.93%	High
24 25 26 27 28	Healthcare Practitioners and Technical Occupations (29-0000)	Martin et al., 2020 ¹⁶¹	n=339	Registered Nurses	Cross-sectional survey	04/01 - 04/15	Spain	5.9%	High
29 30 31 32 33	Healthcare Practitioners and Technical Occupations (29-0000)	Meissner et al., 2020 ¹⁶²	n=439	Registered Nurses	Cross-sectional survey	04/14 - 05/06	United States of America	1.37%	High
34 35 36 37 38	Healthcare Practitioners and Technical Occupations (29-0000)	Mohr et al., 2020 ¹²⁹	n=410	Registered Nurses	Cross-sectional survey	05/13 - 07/08	United States of America	1.46%	Moderate
39 40 41 42 43 44 45 46 47	Healthcare Practitioners and	Moscola et al., 2020 ⁸⁹	n=11468	Registered Nurses	Cross-sectional survey	04/20 - 06/23	United States of America	13.1%	High

Technical Occupations (29-0000)								
Healthcare Practitioners and Technical Occupations (29-0000)	Mostafa et al., 2020 ¹⁶³	n=4040	Registered Nurses	Cross-sectional survey	04/22 - 05/14	Egypt	1.31%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Nishida et al., 2020 ⁹⁰	n=489	Registered Nurses	Cross-sectional survey	06/12 - 06/19	Japan	0.2% (0.04-1.1%)	Moderate
Healthcare Practitioners and Technical Occupations (29-0000)	Noor et al., 2020 ¹³⁰	n=460	Registered Nurses	Cross-sectional survey	07/13 - 07/15	Pakistan	39.78%	Moderate
Healthcare Practitioners and Technical Occupations (29-0000)	Paradiso et al., 2020 ¹⁶⁴	n=606	Registered Nurses	Cross sectional study with prospective cohort follow up of a subset of the sample	03/26 - 04/17	Italy	0.33%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Plebani et al., 2020 ¹⁴⁶	n=3230	Registered Nurses	Cross-sectional survey	02/22 - 05/29	Italy	4.7% (4-5.5%)	High
Healthcare Practitioners and Technical Occupations (29-0000)	Poustchi et al., 2020 ²⁸	n=1245	Registered Nurses	Cross-sectional survey	04/17 - 06/02	Iran (Islamic Republic of)	15.9% (13.9-18%)	Moderate
Healthcare Practitioners and Technical	Rudberg et al., 2020 ¹⁴⁷	n=636	Registered Nurses	Cross-sectional survey	04/14 - 05/08	Sweden	21.9%	Moderate

Occupations (29-0000)								
Healthcare Practitioners and Technical Occupations (29-0000)	Schmidt et al., 2020 ¹⁴⁸	n=154	Registered Nurses	Cross-sectional survey	04/20 - 04/30	Germany	0%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Self et al., 2020 ¹⁵⁴	n=1445	Registered Nurses	Cross-sectional survey	04/03 - 06/19	United States of America	5.05%	Moderate
Healthcare Practitioners and Technical Occupations (29-0000)	Siddiqui et al., 2020 ²	n=59	Registered Nurses	Prospective cohort	04/15 - 08/15	India	10.2%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Siddiqui et al., 2020 ²	n=70	Registered Nurses	Prospective cohort	04/15 - 08/15	India	10%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Sotgiu et al., 2020 ¹⁴⁹	n=64	Registered Nurses	Cross-sectional survey	04/02 - 04/16	Italy	7.8% (1.2-14.4%)	High
Healthcare Practitioners and Technical Occupations (29-0000)	Sydney et al., 2020 ¹⁶⁵	n=81	Registered Nurses	Cross-sectional survey	04/28 - 05/04	United States of America	18.52%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Urbietta et al., 2020 ¹³²	n=83	Registered Nurses	Cross-sectional survey	04/14 - 04/16	Spain	4.8%	High

1 2 3 4 5 6 7	Healthcare Practitioners and Technical Occupations (29-0000)	Urbietta et al., 2020 ¹³²	n=23	Registered Nurses	Cross-sectional survey	04/14 - 04/16	Spain	8.7%	High
8 9 10 11 12	Healthcare Practitioners and Technical Occupations (29-0000)	Venugopal et al., 2020 ¹⁵⁰	n=142	Registered Nurses	Cross-sectional survey	03/01 - 05/01	United States of America	28%	Moderate
13 14 15 16 17 18	Healthcare Practitioners and Technical Occupations (29-0000)	Yogo et al., 2020 ³⁶	n=1129	Registered Nurses	Cross-sectional survey	05/20 - 06/08	United States of America	2.48%	High
19 20 21 22 23	Healthcare Practitioners and Technical Occupations (29-0000)	Yogo et al., 2020 ³⁶	n=12	Registered Nurses	Cross-sectional survey	05/20 - 06/08	United States of America	0%	High
24 25 26 27 28	Healthcare Practitioners and Technical Occupations (29-0000)	Zhou et al., 2020 ¹⁶⁶	n=2406	Registered Nurses	Cross-sectional survey	03/16 - 03/25	China	1.37%	Moderate
29 30 31 32 33	Healthcare Practitioners and Technical Occupations (29-0000)	Godbout et al., 2020 ¹³⁸	n=141	Nurse Practitioners	Cross-sectional survey	07/27 - 10/02	United States of America	1.42%	High
34 35 36 37 38	Healthcare Practitioners and Technical Occupations (29-0000)	Dimcheff et al., 2020 ¹⁵⁷	n=214	Nurse Practitioners	Cross-sectional survey	06/08 - 07/08	United States of America	3.7%	Moderate
39 40 41 42 43 44 45 46 47	Healthcare Practitioners and	Akinbami et al., 2020 ⁴⁶	n=719	Health Technologists and Technicians	Cross-sectional survey	05/18 - 06/13	United States of America	4.2% (2.8-5.9%)	Moderate

Technical Occupations (29-0000)								
Healthcare Practitioners and Technical Occupations (29-0000)	Blairon et al., 2020 ⁵²	n=61	Health Technologists and Technicians	Cross-sectional survey	05/25 - 06/19	Belgium	6.6%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Yogo et al., 2020 ³⁶	n=65	Health Technologists and Technicians	Cross-sectional survey	05/20 - 06/08	United States of America	4.62%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Silva et al., 2020 ³⁴	n=224	Clinical Laboratory Technologists and Technicians	Cross-sectional survey	06/05 - 07/31	Brazil	7.59%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Costa et al., 2020 ¹²⁸	n=66	Medical and Clinical Laboratory Technologists	Cross-sectional survey	05/14 - 05/28	Brazil	3%	Moderate
Healthcare Practitioners and Technical Occupations (29-0000)	Akinbami et al., 2020 ⁴⁶	n=293	Medical and Clinical Laboratory Technicians	Cross-sectional survey	05/18 - 06/13	United States of America	3.4% (1.7-6.2%)	Moderate
Healthcare Practitioners and Technical Occupations (29-0000)	Akinbami et al., 2020 ⁴⁶	n=365	Medical and Clinical Laboratory Technicians	Cross-sectional survey	05/18 - 06/13	United States of America	5.5% (3.4-8.3%)	Moderate
Healthcare Practitioners and Technical	Alharbi et al., 2020 ¹²⁵	n=80	Medical and Clinical Laboratory Technicians	Cross-sectional survey	04/18 - 06/17	Saudi Arabia	20%	High

Occupations (29-0000)								
Healthcare Practitioners and Technical Occupations (29-0000)	Baracco et al., 2020 ²⁴	n=256	Medical and Clinical Laboratory Technicians	Cross-sectional survey	04/23 - 05/05	Italy	12.1%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Brehm et al., 2020 ⁷	n=105	Medical and Clinical Laboratory Technicians	Cross sectional study with prospective cohort follow up of a subset of the sample	03/20 - 07/17	Germany	0%	Moderate
Healthcare Practitioners and Technical Occupations (29-0000)	Calcagno et al., 2020 ¹²⁴	n=216	Medical and Clinical Laboratory Technicians	Cross-sectional survey	04/17 - 05/20	Italy	6.94%	Moderate
Healthcare Practitioners and Technical Occupations (29-0000)	Calcagno et al., 2020 ¹²⁴	n=157	Medical and Clinical Laboratory Technicians	Cross-sectional survey	04/17 - 05/20	Italy	11.46%	Moderate
Healthcare Practitioners and Technical Occupations (29-0000)	Chau et al., 2020 ¹²⁶	n=33	Medical and Clinical Laboratory Technicians	Cross-sectional survey	08/23 - 08/30	Viet Nam	0%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Galan et al., 2020 ²⁰	n=192	Medical and Clinical Laboratory Technicians	Cross-sectional survey	04/14 - 04/27	Spain	21.35%	High
Healthcare Practitioners and Technical	Goenka et al., 2020 ²⁵	n=72	Medical and Clinical Laboratory Technicians	Cross-sectional survey	07/12 - 08/23	India	15.28%	Moderate

Occupations (29-0000)								
Healthcare Practitioners and Technical Occupations (29-0000)	Haq et al., 2020 ⁶⁷	n=32	Medical and Clinical Laboratory Technicians	Cross-sectional survey	06/15 - 06/29	Pakistan	50% (31.8-68.1%)	Moderate
Healthcare Practitioners and Technical Occupations (29-0000)	Iversen et al., 2020 ⁸	n=1292	Medical and Clinical Laboratory Technicians	Cross-sectional survey	04/15 - 04/22	Denmark	1.93%	Low
Healthcare Practitioners and Technical Occupations (29-0000)	Khan et al., 2020 ¹²⁷	n=397	Medical and Clinical Laboratory Technicians	Cross-sectional survey	06/15 - 06/29	India	2.5% (1.4-4.6%)	Moderate
Healthcare Practitioners and Technical Occupations (29-0000)	Lumley et al., 2020 ⁹	n=452	Medical and Clinical Laboratory Technicians	Prospective cohort	04/23 - 11/30	The United Kingdom	8.63%	Moderate
Healthcare Practitioners and Technical Occupations (29-0000)	Nishida et al., 2020 ⁹⁰	n=140	Medical and Clinical Laboratory Technicians	Cross-sectional survey	06/12 - 06/19	Japan	0%	Moderate
Healthcare Practitioners and Technical Occupations (29-0000)	Rosser et al., 2020 ³³	n=225	Medical and Clinical Laboratory Technicians	Cross-sectional survey	04/20 - 05/20	United States of America	0.44%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Iversen et al., 2020 ⁸	n=342	Radiologic Technologists	Cross-sectional survey	04/15 - 04/22	Denmark	3.51%	Low

Healthcare Practitioners and Technical Occupations (29-0000)	Martin et al., 2020 ²³	n=241	Radiologic Technologists	Cross-sectional survey	05/29 - 07/13	The United Kingdom	9.96%	Moderate
Healthcare Practitioners and Technical Occupations (29-0000)	Akinbami et al., 2020 ⁴⁶	n=1158	Emergency Medical Technicians and Paramedics	Cross-sectional survey	05/18 - 06/13	United States of America	5.2% (4-6.6%)	Moderate
Healthcare Practitioners and Technical Occupations (29-0000)	Buntinx et al., 2020 ¹⁶⁷	n=10	Emergency Medical Technicians and Paramedics	Cross-sectional survey	04/14 - 04/16	Belgium	10%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Haq et al., 2020 ⁶⁷	n=157	Emergency Medical Technicians and Paramedics	Cross-sectional survey	06/15 - 06/29	Pakistan	42% (34.2-50.1%)	Moderate
Healthcare Practitioners and Technical Occupations (29-0000)	Iversen et al., 2020 ⁸	n=323	Emergency Medical Technicians and Paramedics	Cross-sectional survey	04/15 - 04/22	Denmark	4.95%	Low
Healthcare Practitioners and Technical Occupations (29-0000)	Mesnil et al., 2020 ¹⁴³	n=212	Emergency Medical Technicians and Paramedics	Cross-sectional survey	06/08 - 06/22	France	11%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Reuben et al., 2020 ¹⁶⁸	n=10	Emergency Medical Technicians and Paramedics	Cross-sectional survey	05/28 - 07/15	United States of America	0%	High

Healthcare Practitioners and Technical Occupations (29-0000)	Saberian et al., 2020 ¹⁶⁹	n=243	Emergency Medical Technicians and Paramedics	Cross-sectional survey	03/20 - 05/20	Iran (Islamic Republic of)	41.56%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Self et al., 2020 ¹⁵⁴	n=56	Emergency Medical Technicians and Paramedics	Cross-sectional survey	04/03 - 06/19	United States of America	5.36%	Moderate
Healthcare Practitioners and Technical Occupations (29-0000)	Tarabichi et al., 2020 ¹⁷⁰	n=111	Emergency Medical Technicians and Paramedics	Cross-sectional survey	04/20 - 05/19	United States of America	5.41%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Baracco et al., 2020 ²⁴	n=188	Health Technologists and Technicians, All Other	Cross-sectional survey	04/23 - 05/05	Italy	13.8%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Chau et al., 2020 ¹²⁶	n=22	Health Technologists and Technicians, All Other	Cross-sectional survey	08/23 - 08/30	Viet Nam	0%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Goenka et al., 2020 ²⁵	n=99	Health Technologists and Technicians, All Other	Cross-sectional survey	07/12 - 08/23	India	12.12%	Moderate
Healthcare Practitioners and Technical Occupations (29-0000)	Goenka et al., 2020 ²⁶	n=16	Health Technologists and Technicians, All Other	Cross-sectional survey	08/01 - 08/31	India	68.75%	High
Healthcare Support	Jeremias et al., 2020 ⁷⁰	n=155	Healthcare Support Occupations	Cross-sectional survey	03/01 - 04/30	United States of America	5.8%	High

Occupations (31-0000)								
Healthcare Support Occupations (31-0000)	Ward et al., 2020 ¹¹³	n=979	Nursing, Psychiatric, and Home Health Aides	Cross-sectional survey	09/15 - 09/28	The United Kingdom	11.09% (8.96-13.59%)	Moderate
Healthcare Support Occupations (31-0000)	Ward et al., 2020 ¹¹³	n=257	Nursing, Psychiatric, and Home Health Aides	Cross-sectional survey	09/15 - 09/28	The United Kingdom	8.95%	Moderate
Healthcare Support Occupations (31-0000)	Vijh et al., 2020 ¹⁷¹	n=169	Nursing, Psychiatric, and Home Health Aides	Cross-sectional survey	05/04 - 05/14	Canada	26.63%	High
Healthcare Support Occupations (31-0000)	Akinbami et al., 2020 ⁴⁶	n=641	Nursing Assistants	Cross-sectional survey	05/18 - 06/13	United States of America	12.8% (10.3-15.6%)	Moderate
Healthcare Support Occupations (31-0000)	Bampoe et al., 2020 ¹⁵⁶	n=108	Nursing Assistants	Cross-sectional survey	05/11 - 06/05	The United Kingdom	15.7% (9.5-24%)	High
Healthcare Support Occupations (31-0000)	Baracco et al., 2020 ²⁴	n=257	Nursing Assistants	Cross-sectional survey	04/23 - 05/05	Italy	22.2%	High
Healthcare Support Occupations (31-0000)	Barallat et al., 2020 ⁵⁰	n=832	Nursing Assistants	Cross-sectional survey	05/04 - 05/22	Spain	13.94%	High
Healthcare Support Occupations (31-0000)	Bhattacharya et al., 2020 ¹⁷²	n=121	Nursing Assistants	Cross-sectional survey	06/01 - 06/15	United States of America	1.65%	High
Healthcare Support	Brousseau et al., 2020 ¹³⁴	n=132	Nursing Assistants	Cross-sectional survey	07/06 - 09/24	Canada	16.7%	High

Occupations (31-0000)								
Healthcare Support Occupations (31-0000)	Brunner et al., 2020 ⁵⁴	n=95	Nursing Assistants	Cross-sectional survey	05/04 - 05/29	United States of America	1.05%	High
Healthcare Support Occupations (31-0000)	Brzostek et al., 2020 ¹⁵¹	n=570	Nursing Assistants	Cross-sectional survey	04/17 - 05/07	United States of America	39.5%	Moderate
Healthcare Support Occupations (31-0000)	Brzostek et al., 2020 ¹⁵¹	n=263	Nursing Assistants	Cross-sectional survey	04/17 - 05/07	United States of America	45.6%	Moderate
Healthcare Support Occupations (31-0000)	Calcagno et al., 2020 ¹²⁴	n=476	Nursing Assistants	Cross-sectional survey	04/17 - 05/20	Italy	9.24%	Moderate
Healthcare Support Occupations (31-0000)	Costa et al., 2020 ¹²⁸	n=553	Nursing Assistants	Cross-sectional survey	05/14 - 05/28	Brazil	10.5%	Moderate
Healthcare Support Occupations (31-0000)	Galan et al., 2020 ²⁰	n=472	Nursing Assistants	Cross-sectional survey	04/14 - 04/27	Spain	33.26%	High
Healthcare Support Occupations (31-0000)	Garcia et al., 2020 ¹⁷³	n=2424	Nursing Assistants	Cross-sectional survey	05/01 - 05/30	Spain	22.4%	High
Healthcare Support Occupations (31-0000)	Garcia et al., 2020 ¹⁷⁴	n=2424	Nursing Assistants	Cross-sectional survey	05/01 - 05/30	Spain	22.4%	High
Healthcare Support	Hanrath et al., 2020 ³²	n=1434	Nursing Assistants	Cross-sectional survey	05/29 - 07/06	The United Kingdom	11.44%	High

Occupations (31-0000)								
Healthcare Support Occupations (31-0000)	Iversen et al., 2020 ⁸	n=501	Nursing Assistants	Cross-sectional survey	04/15 - 04/22	Denmark	1.2%	Low
Healthcare Support Occupations (31-0000)	Khan et al., 2020 ¹²⁷	n=624	Nursing Assistants	Cross-sectional survey	06/15 - 06/29	India	2.4% (1.5-4%)	Moderate
Healthcare Support Occupations (31-0000)	Mughal et al., 2020 ¹⁷⁵	n=121	Nursing Assistants	Cross-sectional survey	05/14 - 05/19	United States of America	0.83%	High
Healthcare Support Occupations (31-0000)	Rao et al., 2020 ¹⁷⁶	n=1000	Nursing Assistants	Cross-sectional survey	05/23 - 06/06	India	1%	Unclear
Healthcare Support Occupations (31-0000)	Rudberg et al., 2020 ¹⁴⁷	n=428	Nursing Assistants	Cross-sectional survey	04/14 - 05/08	Sweden	25.5%	Moderate
Healthcare Support Occupations (31-0000)	Siddiqui et al., 2020 ²	n=28	Nursing Assistants	Prospective cohort	04/15 - 08/15	India	10.7%	High
Healthcare Support Occupations (31-0000)	Yogo et al., 2020 ³⁶	n=154	Nursing Assistants	Cross-sectional survey	05/20 - 06/08	United States of America	3.24%	High
Healthcare Support Occupations (31-0000)	Brousseau et al., 2020 ¹³⁴	n=201	Orderlies	Cross-sectional survey	07/06 - 09/24	Canada	17.9%	High
Healthcare Support	Kassem et al., 2020 ⁷²	n=9	Orderlies	Cross-sectional survey	06/01 - 06/14	Egypt	0%	High

Occupations (31-0000)								
Healthcare Support Occupations (31-0000)	Kassem et al., 2020 ⁷²	n=9	Orderlies	Cross-sectional survey	06/01 - 06/14	Egypt	33.33%	High
Healthcare Support Occupations (31-0000)	Kassem et al., 2020 ⁷²	n=9	Orderlies	Cross-sectional survey	06/01 - 06/14	Egypt	11.11%	High
Healthcare Support Occupations (31-0000)	Kassem et al., 2020 ⁷²	n=9	Orderlies	Cross-sectional survey	06/01 - 06/14	Egypt	22.22%	High
Healthcare Support Occupations (31-0000)	Hanrath et al., 2020 ³²	n=122	Orderlies	Cross-sectional survey	05/29 - 07/06	The United Kingdom	9.02%	High
Healthcare Support Occupations (31-0000)	Lumley et al., 2020 ⁹	n=377	Orderlies	Prospective cohort	04/23 - 11/30	The United Kingdom	15.38%	Moderate
Healthcare Support Occupations (31-0000)	Rosser et al., 2020 ³³	n=3959	Medical Assistants	Cross-sectional survey	04/20 - 05/20	United States of America	1.39%	High
Healthcare Support Occupations (31-0000)	Yogo et al., 2020 ³⁶	n=106	Phlebotomists	Cross-sectional survey	05/20 - 06/08	United States of America	0%	High
Healthcare Support Occupations (31-0000)	Cavlek et al., 2020 ⁵⁶	n=300	Healthcare Support Workers, All Other	Cross-sectional survey	04/25 - 05/24	Croatia	0.67%	High
Healthcare Support	Erber et al., 2020 ³¹	n=383	Healthcare Support Workers, All Other	Cross-sectional survey	04/14 - 05/29	Germany	2.34%	High

Occupations (31-0000)								
Healthcare Support Occupations (31-0000)	Khan et al., 2020 ¹²⁷	n=141	Healthcare Support Workers, All Other	Cross-sectional survey	06/15 - 06/29	India	0%	Moderate
Protective Service Occupations (33-0000)	Shukla et al., 2020 ¹⁷⁷	n=1713	Protective Service Occupations	Cross-sectional survey	04/24 - 05/21	United States of America	1.46%	Moderate
Protective Service Occupations (33-0000)	Martinez et al., 2020 ¹²¹	n=18	First-Line Supervisors of Fire Fighting and Prevention Workers	Cross-sectional survey	04/16 - 04/17	United States of America	0%	High
Protective Service Occupations (33-0000)	Martinez et al., 2020 ¹²¹	n=47	First-Line Supervisors of Fire Fighting and Prevention Workers	Cross-sectional survey	04/16 - 04/17	United States of America	14.89%	High
Protective Service Occupations (33-0000)	Martinez et al., 2020 ¹²¹	n=13	First-Line Supervisors of Fire Fighting and Prevention Workers	Cross-sectional survey	04/16 - 04/17	United States of America	7.69%	High
Protective Service Occupations (33-0000)	Akinbami et al., 2020 ⁴⁶	n=330	Firefighters	Cross-sectional survey	05/18 - 06/13	United States of America	6.7% (4.2-9.9%)	Moderate
Protective Service Occupations (33-0000)	Gray et al., 2020 ¹⁷⁸	n=132	Firefighters	Cross-sectional survey	05/01 - 05/31	United States of America	14%	High
Protective Service Occupations (33-0000)	Reuben et al., 2020 ¹⁶⁸	n=62	Firefighters	Cross-sectional survey	05/28 - 07/15	United States of America	4.84%	High
Protective Service Occupations (33-0000)	Sabourin et al., 2020 ³⁵	n=42	Firefighters	Cross-sectional survey	07/15 - 08/15	United States of America	2.38%	High
Protective Service Occupations (33-0000)	Tarabichi et al., 2020 ¹⁷⁰	n=185	Firefighters	Cross-sectional survey	04/20 - 05/19	United States of America	5.41%	High

Protective Service Occupations (33-0000)	Martinez et al., 2020 ¹²¹	n=7	Fire Inspectors and Investigators	Cross-sectional survey	04/16 - 04/17	United States of America	14.29%	High
Protective Service Occupations (33-0000)	Akinbami et al., 2020 ⁴⁶	n=785	Police and Sheriff's Patrol Officers	Cross-sectional survey	05/18 - 06/13	United States of America	4% (2.7-5.6%)	Moderate
Protective Service Occupations (33-0000)	Chughtai et al., 2020 ¹⁷⁹	n=154	Police and Sheriff's Patrol Officers	Cross-sectional survey	05/20 - 05/30	Pakistan	15.6%	High
Protective Service Occupations (33-0000)	Gudo et al., 2020 ⁶⁵	n=564	Police and Sheriff's Patrol Officers	Cross-sectional survey	06/17 - 06/30	Mozambique	6% (4-8%)	High
Protective Service Occupations (33-0000)	Gujski et al., 2020 ¹⁸⁰	n=4026	Police and Sheriff's Patrol Officers	Cross-sectional survey	06/22 - 07/08	Poland	4.2%	Moderate
Protective Service Occupations (33-0000)	Halatoko et al., 2020 ⁴¹	n=196	Police and Sheriff's Patrol Officers	Cross-sectional survey	04/23 - 05/08	Togo	0%	High
Protective Service Occupations (33-0000)	Langa et al., 2020 ¹⁸¹	n=471	Police and Sheriff's Patrol Officers	Cross-sectional survey	09/28 - 10/09	Mozambique	1.5%	High
Protective Service Occupations (33-0000)	Macicame et al., 2020 ¹⁸²	n=456	Police and Sheriff's Patrol Officers	Cross-sectional survey	09/14 - 09/30	Mozambique	4.39%	High
Protective Service Occupations (33-0000)	Mahomed et al., 2020 ⁸¹	n=554	Police and Sheriff's Patrol Officers	Cross-sectional survey	08/31 - 10/12	Mozambique	2.9%	High
Protective Service Occupations (33-0000)	Reuben et al., 2020 ¹⁶⁸	n=220	Police and Sheriff's Patrol Officers	Cross-sectional survey	05/28 - 07/15	United States of America	3.64%	High
Protective Service Occupations (33-0000)	Sabourin et al., 2020 ³⁵	n=125	Police and Sheriff's Patrol Officers	Cross-sectional survey	07/15 - 08/15	United States of America	4%	High

Protective Service Occupations (33-0000)	Shukla et al., 2020 ¹⁷⁷	n=1643	Police and Sheriff's Patrol Officers	Cross-sectional survey	04/24 - 05/21	United States of America	1.52%	Moderate
Protective Service Occupations (33-0000)	Siddiqui et al., 2020 ²	n=27	Police and Sheriff's Patrol Officers	Prospective cohort	04/15 - 08/15	India	7.4%	High
Protective Service Occupations (33-0000)	Viegas et al., 2020 ¹¹⁰	n=559	Police and Sheriff's Patrol Officers	Cross-sectional survey	08/03 - 08/21	Mozambique	3.94%	High
Protective Service Occupations (33-0000)	Denyer et al., 2020 ⁶⁰	n=38216	Security Guards	Cross-sectional survey	05/12 - 05/18	Japan	0.23%	Unclear
Protective Service Occupations (33-0000)	Mahumane et al., 2020 ⁸²	n=407	Security Guards	Cross-sectional survey	11/02 - 11/17	Mozambique	4.9%	High
Protective Service Occupations (33-0000)	Siddiqui et al., 2020 ²	n=9	Security Guards	Prospective cohort	04/15 - 08/15	India	0%	High
Protective Service Occupations (33-0000)	Silva et al., 2020 ³⁴	n=32	Security Guards	Cross-sectional survey	06/05 - 07/31	Brazil	34%	High
Protective Service Occupations (33-0000)	Thani et al., 2020 ¹⁸³	n=61	Security Guards	Cross-sectional survey	07/26 - 09/09	Qatar	60.1%	Moderate
Food Preparation and Serving Related Occupations (35-0000)	Thani et al., 2020 ¹⁸³	n=93	Food Preparation and Serving Related Occupations	Cross-sectional survey	07/26 - 09/09	Qatar	29.2%	Moderate
Food Preparation and Serving Related Occupations (35-0000)	Siddiqui et al., 2020 ²	n=8	Cooks, All Other	Prospective cohort	04/15 - 08/15	India	37.5%	High
Food Preparation and Serving	Brunner et al., 2020 ⁵⁴	n=8	Food Preparation Workers	Cross-sectional survey	05/04 - 05/29	United States of America	0%	High

1	Related Occupations (35-0000)								
2	Healthcare Support Occupations (31-0000)	Rosser et al., 2020 ³³	n=335	Healthcare Support Occupations	Cross-sectional survey	04/20 - 05/20	United States of America	3.58%	High
3	Food Preparation and Serving Related Occupations (35-0000)	Biggs et al., 2020 ³	n=24	Food Servers, Nonrestaurant	Cross-sectional survey	04/28 - 05/03	United States of America	4.17%	Moderate
4	Food Preparation and Serving Related Occupations (35-0000)	Leidner et al., 2020 ²²	n=113	Food Servers, Nonrestaurant	Cross sectional study with prospective cohort follow up of a subset of the sample	04/08 - 05/22	United States of America	1.77%	High
5	Food Preparation and Serving Related Occupations (35-0000)	Hanrath et al., 2020 ³²	n=340	Other Food Preparation and Serving Related Workers	Cross-sectional survey	05/29 - 07/06	The United Kingdom	8.53%	High
6	Building and Grounds Cleaning and Maintenance Occupations (37-0000)	Martin et al., 2020 ²³	n=528	Building and Grounds Cleaning and Maintenance Occupations	Cross-sectional survey	05/29 - 07/13	The United Kingdom	8.14%	Moderate
7	Building and Grounds Cleaning and Maintenance Occupations (37-0000)	Brousseau et al., 2020 ¹³⁴	n=102	Building Cleaning and Pest Control Workers	Cross-sectional survey	07/06 - 09/24	Canada	10.8%	High
8	Building and Grounds Cleaning and Maintenance Occupations (37-0000)	Chau et al., 2020 ¹²⁶	n=42	Building Cleaning and Pest Control Workers	Cross-sectional survey	08/23 - 08/30	Viet Nam	0%	High

Occupations (37-0000)								
Building and Grounds Cleaning and Maintenance Occupations (37-0000)	Finkenzeller et al., 2020 ¹⁵⁸	n=57	Building Cleaning and Pest Control Workers	Prospective cohort	06/29 - 07/29	Germany	19.3%	Moderate
Building and Grounds Cleaning and Maintenance Occupations (37-0000)	Chau et al., 2020 ¹²⁶	n=6	Janitors and Cleaners, Except Maids and Housekeeping Cleaners	Cross-sectional survey	08/23 - 08/30	Viet Nam	0%	High
Building and Grounds Cleaning and Maintenance Occupations (37-0000)	Epstude et al., 2020 ¹⁸⁴	n=45	Janitors and Cleaners, Except Maids and Housekeeping Cleaners	Cross-sectional survey	06/15 - 06/30	Germany	0%	High
Building and Grounds Cleaning and Maintenance Occupations (37-0000)	Thani et al., 2020 ¹⁸³	n=105	Janitors and Cleaners, Except Maids and Housekeeping Cleaners	Cross-sectional survey	07/26 - 09/09	Qatar	54.5%	Moderate
Building and Grounds Cleaning and Maintenance Occupations (37-0000)	Brunner et al., 2020 ⁵⁴	n=23	Maids and Housekeeping Cleaners	Cross-sectional survey	05/04 - 05/29	United States of America	0%	High
Building and Grounds Cleaning and Maintenance Occupations (37-0000)	Goenka et al., 2020 ²⁵	n=226	Maids and Housekeeping Cleaners	Cross-sectional survey	07/12 - 08/23	India	26.11%	Moderate
Building and Grounds Cleaning and Maintenance Occupations (37-0000)	Goenka et al., 2020 ²⁶	n=10	Maids and Housekeeping Cleaners	Cross-sectional survey	08/01 - 08/31	India	10%	High

1 2 3 4 5 6 7	Building and Grounds Cleaning and Maintenance Occupations (37-0000)	Hanrath et al., 2020 ³²	n=515	Maids and Housekeeping Cleaners	Cross-sectional survey	05/29 - 07/06	The United Kingdom	13.2%	High
8 9 10 11 12	Building and Grounds Cleaning and Maintenance Occupations (37-0000)	Khan et al., 2020 ¹²⁷	n=276	Maids and Housekeeping Cleaners	Cross-sectional survey	06/15 - 06/29	India	3.3% (1.7-6.2%)	Moderate
13 14 15 16 17 18 19	Building and Grounds Cleaning and Maintenance Occupations (37-0000)	Leidner et al., 2020 ²²	n=137	Maids and Housekeeping Cleaners	Cross sectional study with prospective cohort follow up of a subset of the sample	04/08 - 05/22	United States of America	8.03%	High
20 21 22 23 24	Building and Grounds Cleaning and Maintenance Occupations (37-0000)	Moscola et al., 2020 ⁸⁹	n=7314	Maids and Housekeeping Cleaners	Cross-sectional survey	04/20 - 06/23	United States of America	20.9%	High
25 26 27 28 29	Building and Grounds Cleaning and Maintenance Occupations (37-0000)	Shakiba et al., 2020 ¹⁰	n=159	Maids and Housekeeping Cleaners	Cross-sectional survey	04/11 - 04/19	Iran (Islamic Republic of)	25% (13.6-37.5%)	Moderate
30 31 32 33 34	Building and Grounds Cleaning and Maintenance Occupations (37-0000)	Shields et al., 2020 ⁹⁷	n=29	Maids and Housekeeping Cleaners	Cross-sectional survey	04/24 - 04/25	The United Kingdom	34.5%	High
35 36 37 38 39 40	Building and Grounds Cleaning and Maintenance Occupations (37-0000)	Siddiqui et al., 2020 ²	n=46	Maids and Housekeeping Cleaners	Prospective cohort	04/15 - 08/15	India	21.7%	High

Personal Care and Service Occupations (39-0000)	Biggs et al., 2020 ³	n=10	Hairdressers, Hairstylists, and Cosmetologists	Cross-sectional survey	04/28 - 05/03	United States of America	10%	Moderate
Personal Care and Service Occupations (39-0000)	Biggs et al., 2020 ³	n=48	Childcare Workers	Cross-sectional survey	04/28 - 05/03	United States of America	0%	Moderate
Personal Care and Service Occupations (39-0000)	Chen et al., 2020 ¹³⁵	n=11	Personal Care Aides	Cross-sectional survey	02/19 - 02/19	China	9.09%	High
Personal Care and Service Occupations (39-0000)	Galan et al., 2020 ²⁰	n=337	Personal Care Aides	Cross-sectional survey	04/14 - 04/27	Spain	27.89%	High
Personal Care and Service Occupations (39-0000)	Galan et al., 2020 ²⁰	n=168	Personal Care Aides	Cross-sectional survey	04/14 - 04/27	Spain	27.38%	High
Personal Care and Service Occupations (39-0000)	Godbout et al., 2020 ¹³⁸	n=86	Personal Care Aides	Cross-sectional survey	07/27 - 10/02	United States of America	2.32%	High
Personal Care and Service Occupations (39-0000)	Hassan et al., 2020 ¹⁸⁵	n=403	Personal Care Aides	Cross-sectional survey	05/11 - 06/17	Sweden	20.1%	High
Personal Care and Service Occupations (39-0000)	Kumar et al., 2020 ¹⁴²	n=292	Personal Care Aides	Cross-sectional survey	06/01 - 06/30	India	18.5% (14.5-23.3%)	High
Personal Care and Service Occupations (39-0000)	Ladhani et al., 2020 ¹⁸⁶	n=208	Personal Care Aides	Prospective cohort	04/10 - 04/13	The United Kingdom	75% (68.7-80.4%)	High

Personal Care and Service Occupations (39-0000)	Lindahl et al., 2020 ¹⁸⁷	n=1005	Personal Care Aides	Cross-sectional survey	04/01 - 04/20	Sweden	22.9% (20.4-25.7%)	High
Personal Care and Service Occupations (39-0000)	Regan et al., 2020 ¹⁸⁸	n=305	Personal Care Aides	Cross-sectional survey	04/15 - 05/06	United States of America	23.6%	Unclear
Personal Care and Service Occupations (39-0000)	Siddiqui et al., 2020 ²	n=5	Personal Care Aides	Prospective cohort	04/15 - 08/15	India	40%	High
Personal Care and Service Occupations (39-0000)	Venugopal et al., 2020 ¹⁵⁰	n=72	Personal Care Aides	Cross-sectional survey	03/01 - 05/01	United States of America	28%	Moderate
Personal Care and Service Occupations (39-0000)	Viegas et al., 2020 ¹¹⁰	n=85	Personal Care Aides	Cross-sectional survey	08/03 - 08/21	Mozambique	1.18%	High
Sales and Related Occupations (41-0000)	Arnaldo et al., 2020 ¹³	n=928	Sales and Related Occupations	Cross-sectional survey	07/06 - 07/13	Mozambique	6.5%	High
Sales and Related Occupations (41-0000)	Arnaldo et al., 2020 ⁴⁸	n=1123	Sales and Related Occupations	Cross-sectional survey	08/10 - 08/21	Mozambique	1.6%	High
Sales and Related Occupations (41-0000)	Langa et al., 2020 ¹⁸¹	n=871	Sales and Related Occupations	Cross-sectional survey	09/28 - 10/09	Mozambique	0.2%	High
Sales and Related Occupations (41-0000)	Mabunda et al., 2020 ¹⁵	n=1585	Sales and Related Occupations	Cross-sectional survey	09/21 - 10/02	Mozambique	8.3%	High
Sales and Related Occupations (41-0000)	Macicame et al., 2020 ¹⁸²	n=1288	Sales and Related Occupations	Cross-sectional survey	09/14 - 09/30	Mozambique	4.97%	High

Sales and Related Occupations (41-0000)	Mahomed et al., 2020 ⁸¹	n=1556	Sales and Related Occupations	Cross-sectional survey	08/31 - 10/12	Mozambique	0.8%	High
Sales and Related Occupations (41-0000)	Mahumane et al., 2020 ⁸²	n=643	Sales and Related Occupations	Cross-sectional survey	11/02 - 11/17	Mozambique	1.9%	High
Sales and Related Occupations (41-0000)	Arnaldo et al., 2020 ¹⁴	n=472	Sales and Related Occupations	Cross-sectional survey	11/16 - 11/21	Mozambique	6.8%	High
Sales and Related Occupations (41-0000)	Arnaldo et al., 2020 ¹⁴	n=460	Sales and Related Occupations	Cross-sectional survey	11/02 - 11/12	Mozambique	5.9%	High
Sales and Related Occupations (41-0000)	Mahomed et al., 2020 ¹⁶	n=517	Sales and Related Occupations	Cross-sectional survey	11/26 - 12/03	Mozambique	8.9%	High
Sales and Related Occupations (41-0000)	Mahomed et al., 2020 ¹⁶	n=1001	Sales and Related Occupations	Cross-sectional survey	11/07 - 11/21	Mozambique	4.5%	High
Sales and Related Occupations (41-0000)	Biggs et al., 2020 ³	n=19	Retail Sales Workers	Cross-sectional survey	04/28 - 05/03	United States of America	0%	Moderate
Sales and Related Occupations (41-0000)	Poustchi et al., 2020 ²⁸	n=753	Cashiers	Cross-sectional survey	04/17 - 06/02	Iran (Islamic Republic of)	16.1% (12.9-19.2%)	Moderate
Sales and Related Occupations (41-0000)	Alali et al., 2020 ¹⁸⁹	n=525	Cashiers	Cross-sectional survey	05/23 - 06/26	Kuwait	38.1% (34-42.3%)	High
Sales and Related Occupations (41-0000)	Denyer et al., 2020 ⁶⁰	n=19075	Retail Salespersons	Cross-sectional survey	05/12 - 05/18	Japan	0.04%	Unclear
Sales and Related Occupations (41-0000)	Kern et al., 2020 ⁷³	n=300	Retail Salespersons	Cross-sectional survey	04/09 - 04/16	Germany	0.33% (0.01-1.84%)	High

Office and Administrative Support Occupations (43-0000)	Rosser et al., 2020 ³³	n=972	Office and Administrative Support Occupations	Cross-sectional survey	04/20 - 05/20	United States of America	1.34%	High
Office and Administrative Support Occupations (43-0000)	Tsitsilonis et al., 2020 ¹²	n=504	Office and Administrative Support Occupations	Cross-sectional survey	06/15 - 07/15	Greece	0.48% (0-2.37%)	Moderate
Office and Administrative Support Occupations (43-0000)	Khan et al., 2020 ⁴⁵	n=37	Hotel, Motel, and Resort Desk Clerks	Cross-sectional survey	07/01 - 07/15	India	10.8% (4.1-25.5%)	Moderate
Office and Administrative Support Occupations (43-0000)	Brunner et al., 2020 ⁵⁴	n=26	Receptionists and Information Clerks	Cross-sectional survey	05/04 - 05/29	United States of America	0%	High
Office and Administrative Support Occupations (43-0000)	Favara et al., 2020 ¹³⁶	n=10	Receptionists and Information Clerks	Prospective cohort	06/01 - 06/07	The United Kingdom	0%	High
Office and Administrative Support Occupations (43-0000)	Moscola et al., 2020 ⁸⁹	n=9645	Receptionists and Information Clerks	Cross-sectional survey	04/20 - 06/23	United States of America	12.6%	High
Office and Administrative Support Occupations (43-0000)	Biggs et al., 2020 ³	n=11	Shipping, Receiving, and Traffic Clerks	Cross-sectional survey	04/28 - 05/03	United States of America	18.18%	Moderate
Office and Administrative	Silva et al., 2020 ³⁴	n=82	Stock Clerks and Order Fillers	Cross-sectional survey	06/05 - 07/31	Brazil	4.88%	High

Support Occupations (43-0000)								
Office and Administrative Support Occupations (43-0000)	Khan et al., 2020 ⁴⁵	n=186	Secretaries and Administrative Assistants	Cross-sectional survey	07/01 - 07/15	India	3.8% (1.8-7.7%)	Moderate
Office and Administrative Support Occupations (43-0000)	Alemu et al., 2020 ⁶	n=48	Executive Secretaries and Executive Administrative Assistants	Cross-sectional survey	04/23 - 04/28	Ethiopia	2.1%	Moderate
Office and Administrative Support Occupations (43-0000)	Barallat et al., 2020 ⁵⁰	n=1181	Executive Secretaries and Executive Administrative Assistants	Cross-sectional survey	05/04 - 05/22	Spain	6.52%	High
Office and Administrative Support Occupations (43-0000)	Lumley et al., 2020 ⁹	n=1557	Executive Secretaries and Executive Administrative Assistants	Prospective cohort	04/23 - 11/30	The United Kingdom	6.74%	Moderate
Office and Administrative Support Occupations (43-0000)	Reuben et al., 2020 ¹⁶⁸	n=18	Executive Secretaries and Executive Administrative Assistants	Cross-sectional survey	05/28 - 07/15	United States of America	0%	High
Office and Administrative Support Occupations (43-0000)	Akinbami et al., 2020 ⁴⁶	n=964	Medical Secretaries	Cross-sectional survey	05/18 - 06/13	United States of America	8% (6.4-9.9%)	Moderate
Office and Administrative Support	Alharbi et al., 2020 ¹²⁵	n=8	Medical Secretaries	Cross-sectional survey	04/18 - 06/17	Saudi Arabia	25%	High

Occupations (43-0000)								
Office and Administrative Support Occupations (43-0000)	Dimcheff et al., 2020 ¹⁵⁷	n=357	Medical Secretaries	Cross-sectional survey	06/08 - 07/08	United States of America	4.2%	Moderate
Office and Administrative Support Occupations (43-0000)	Erber et al., 2020 ³¹	n=557	Medical Secretaries	Cross-sectional survey	04/14 - 05/29	Germany	3.78%	High
Office and Administrative Support Occupations (43-0000)	Finkenzeller et al., 2020 ¹⁵⁸	n=240	Medical Secretaries	Prospective cohort	06/29 - 07/29	Germany	7.1%	Moderate
Office and Administrative Support Occupations (43-0000)	Goenka et al., 2020 ²⁵	n=75	Medical Secretaries	Cross-sectional survey	07/12 - 08/23	India	8%	Moderate
Office and Administrative Support Occupations (43-0000)	Goenka et al., 2020 ²⁵	n=75	Medical Secretaries	Cross-sectional survey	07/12 - 08/23	India	8%	Moderate
Office and Administrative Support Occupations (43-0000)	Iversen et al., 2020 ⁸	n=2631	Medical Secretaries	Cross-sectional survey	04/15 - 04/22	Denmark	2.7%	Low
Office and Administrative Support Occupations (43-0000)	Leidner et al., 2020 ²²	n=793	Medical Secretaries	Cross sectional study with prospective cohort follow up of a	04/08 - 05/22	United States of America	3.15%	High

				subset of the sample				
Office and Administrative Support Occupations (43-0000)	Mesnil et al., 2020 ¹⁴³	n=184	Medical Secretaries	Cross-sectional survey	06/08 - 06/22	France	14.13%	High
Office and Administrative Support Occupations (43-0000)	Nishida et al., 2020 ⁹⁰	n=98	Medical Secretaries	Cross-sectional survey	06/12 - 06/19	Japan	1% (0.18-5.6%)	Moderate
Office and Administrative Support Occupations (43-0000)	Noor et al., 2020 ¹³⁰	n=91	Medical Secretaries	Cross-sectional survey	07/13 - 07/15	Pakistan	43.96%	Moderate
Office and Administrative Support Occupations (43-0000)	Thani et al., 2020 ¹⁸³	n=82	Medical Secretaries	Cross-sectional survey	07/26 - 09/09	Qatar	31.6%	Moderate
Office and Administrative Support Occupations (43-0000)	Zhou et al., 2020 ¹⁶⁶	n=505	Medical Secretaries	Cross-sectional survey	03/16 - 03/25	China	1.39%	Moderate
Office and Administrative Support Occupations (43-0000)	Chau et al., 2020 ¹²⁶	n=20	Data Entry Keyers	Cross-sectional survey	08/23 - 08/30	Viet Nam	0%	High
Office and Administrative Support Occupations (43-0000)	Jones et al., 2020 ²⁹	n=1233	Office Clerks, General	Cross-sectional survey	01/15 - 06/15	The United Kingdom	6.1%	High

Office and Administrative Support Occupations (43-0000)	Rosser et al., 2020 ³³	n=218	Office Clerks, General	Cross-sectional survey	04/20 - 05/20	United States of America	0%	High
Office and Administrative Support Occupations (43-0000)	Satpati et al., 2020 ²⁷	n=47	Office Clerks, General	Cross-sectional survey	07/26 - 08/08	India	4.26%	Moderate
Office and Administrative Support Occupations (43-0000)	Baracco et al., 2020 ²⁴	n=194	Office and Administrative Support Workers, All Other	Cross-sectional survey	04/23 - 05/05	Italy	14.4%	High
Office and Administrative Support Occupations (43-0000)	Brzostek et al., 2020 ¹⁵¹	n=286	Office and Administrative Support Workers, All Other	Cross-sectional survey	04/17 - 05/07	United States of America	45.5%	Moderate
Office and Administrative Support Occupations (43-0000)	Kassem et al., 2020 ⁷²	n=7	Office and Administrative Support Workers, All Other	Cross-sectional survey	06/01 - 06/14	Egypt	14.28%	High
Office and Administrative Support Occupations (43-0000)	Kassem et al., 2020 ⁷²	n=7	Office and Administrative Support Workers, All Other	Cross-sectional survey	06/01 - 06/14	Egypt	0%	High
Office and Administrative Support Occupations (43-0000)	Kassem et al., 2020 ⁷²	n=7	Office and Administrative Support Workers, All Other	Cross-sectional survey	06/01 - 06/14	Egypt	0%	High

Office and Administrative Support Occupations (43-0000)	Kassem et al., 2020 ⁷²	n=7	Office and Administrative Support Workers, All Other	Cross-sectional survey	06/01 - 06/14	Egypt	14.28%	High
Farming, Fishing, and Forestry Occupations (45-0000)	Satpati et al., 2020 ²⁷	n=53	Agricultural Workers	Cross-sectional survey	07/26 - 08/08	India	0%	Moderate
Farming, Fishing, and Forestry Occupations (45-0000)	Addetia et al., 2020 ¹⁹⁰	n=120	Fishers and Related Fishing Workers	Retrospective cohort	05/01 - 05/31	United States of America	5%	High
Farming, Fishing, and Forestry Occupations (45-0000)	Arnaldo et al., 2020 ¹³	n=80	Fishers and Related Fishing Workers	Cross-sectional survey	07/06 - 07/13	Mozambique	5%	High
Construction and Extraction Occupations (47-0000)	Biggs et al., 2020 ³	n=42	Construction Trades Workers	Cross-sectional survey	04/28 - 05/03	United States of America	0%	Moderate
Installation, Maintenance, and Repair Occupations (49-0000)	Blairon et al., 2020 ⁵²	n=134	Other Installation, Maintenance, and Repair Occupations	Cross-sectional survey	05/25 - 06/19	Belgium	16.4%	High
Production Occupations (51-0000)	Picon et al., 2020 ¹⁹¹	n=40	Butchers and Other Meat, Poultry, and Fish Processing Workers	Cross-sectional survey	06/13 - 06/17	Brazil	15%	Moderate
Production Occupations (51-0000)	Picon et al., 2020 ¹⁹¹	n=1087	Miscellaneous Food Processing Workers	Cross-sectional survey	06/13 - 06/17	Brazil	1.47%	Moderate
Production Occupations (51-0000)	Bontadi et al., 2020 ¹⁹²	n=1267	Production Workers, All Other	Cross-sectional survey	04/11 - 04/29	Italy	1.58%	High

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47	Production Occupations (51-0000)	Xu et al., 2020 ¹⁹³	n=442	Production Workers, All Other	Cross-sectional survey	03/09 - 04/10	China	1.4% (0.6-2.9%)	High
	Transportation and Material Moving Occupations (53-0000)	Arnaldo et al., 2020 ¹³	n=248	Transportation and Material Moving Occupations	Cross-sectional survey	07/06 - 07/13	Mozambique	4.8%	High
	Transportation and Material Moving Occupations (53-0000)	Arnaldo et al., 2020 ⁴⁸	n=367	Transportation and Material Moving Occupations	Cross-sectional survey	08/10 - 08/21	Mozambique	7.4%	High
	Transportation and Material Moving Occupations (53-0000)	Arnaldo et al., 2020 ¹⁴	n=112	Transportation and Material Moving Occupations	Cross-sectional survey	11/16 - 11/21	Mozambique	16.1%	High
	Transportation and Material Moving Occupations (53-0000)	Biggs et al., 2020 ³	n=14	Transportation and Material Moving Occupations	Cross-sectional survey	04/28 - 05/03	United States of America	0%	Moderate
	Transportation and Material Moving Occupations (53-0000)	Gudo et al., 2020 ⁶⁵	n=554	Transportation and Material Moving Occupations	Cross-sectional survey	06/17 - 06/30	Mozambique	3% (1-4%)	High
	Transportation and Material Moving Occupations (53-0000)	Langa et al., 2020 ¹⁸¹	n=230	Transportation and Material Moving Occupations	Cross-sectional survey	09/28 - 10/09	Mozambique	0.4%	High
	Transportation and Material Moving Occupations (53-0000)	Mabunda et al., 2020 ¹⁵	n=473	Transportation and Material Moving Occupations	Cross-sectional survey	09/21 - 10/02	Mozambique	8.7%	High
	Transportation and Material Moving Occupations (53-0000)	Macicame et al., 2020 ¹⁸²	n=282	Transportation and Material Moving Occupations	Cross-sectional survey	09/14 - 09/30	Mozambique	3.19%	High

1 2 3 4 5 6 7	Transportation and Material Moving Occupations (53-0000)	Mahomed et al., 2020 ⁸¹	n=334	Transportation and Material Moving Occupations	Cross-sectional survey	08/31 - 10/12	Mozambique	1.5%	High
8 9 10 11	Transportation and Material Moving Occupations (53-0000)	Mahumane et al., 2020 ⁸²	n=287	Transportation and Material Moving Occupations	Cross-sectional survey	11/02 - 11/17	Mozambique	1%	High
12 13 14 15	Transportation and Material Moving Occupations (53-0000)	Thani et al., 2020 ¹⁸³	n=435	Transportation and Material Moving Occupations	Cross-sectional survey	07/26 - 09/09	Qatar	53.4%	Moderate
16 17 18 19	Transportation and Material Moving Occupations (53-0000)	Halatoko et al., 2020 ⁴¹	n=212	Air Transportation Workers	Cross-sectional survey	04/23 - 05/08	Togo	0.9%	High
20 21 22 23	Transportation and Material Moving Occupations (53-0000)	Viegas et al., 2020 ¹¹⁰	n=623	Air Transportation Workers	Cross-sectional survey	08/03 - 08/21	Mozambique	2.25%	High
24 25 26 27 28	Transportation and Material Moving Occupations (53-0000)	Viegas et al., 2020 ¹¹⁰	n=362	Air Transportation Workers	Cross-sectional survey	08/03 - 08/21	Mozambique	3.31%	High
29 30 31 32	Transportation and Material Moving Occupations (53-0000)	Khan et al., 2020 ¹²⁷	n=57	Ambulance Drivers and Attendants, Except Emergency Medical Technicians	Cross-sectional survey	06/15 - 06/29	India	3.5% (0.9-13.3%)	Moderate
33 34 35 36	Transportation and Material Moving Occupations (53-0000)	Martinez et al., 2020 ¹²¹	n=30	Heavy and Tractor-Trailer Truck Drivers	Cross-sectional survey	04/16 - 04/17	United States of America	16.67%	High
37 38 39 40 41 42 43 44 45 46 47	Transportation and Material Moving Occupations (53-0000)	Siddiqui et al., 2020 ²	n=9	Heavy and Tractor-Trailer Truck Drivers	Prospective cohort	04/15 - 08/15	India	11.1%	High

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Transportation and Material Moving Occupations (53-0000)	Halatoko et al., 2020 ⁴¹	n=122	Taxi Drivers and Chauffeurs	Cross-sectional survey	04/23 - 05/08	Togo	0.8%	High																																														
Transportation and Material Moving Occupations (53-0000)	Poustchi et al., 2020 ²⁸	n=718	Taxi Drivers and Chauffeurs	Cross-sectional survey	04/17 - 06/02	Iran (Islamic Republic of)	14.1% (11.4-16.9%)	Moderate																																														
Transportation and Material Moving Occupations (53-0000)	Alemu et al., 2020 ⁶	n=8	Parking Lot Attendants	Cross-sectional survey	04/23 - 04/28	Ethiopia	12.5%	Moderate																																														
Transportation and Material Moving Occupations (53-0000)	Alemu et al., 2020 ⁶	n=110	Laborers and Freight, Stock, and Material Movers, Hand	Cross-sectional survey	04/23 - 04/28	Ethiopia	10%	Moderate																																														
Transportation and Material Moving Occupations (53-0000)	Khan et al., 2020 ⁴⁵	n=97	Laborers and Freight, Stock, and Material Movers, Hand	Cross-sectional survey	07/01 - 07/15	India	2.1% (0.5-7.9%)	Moderate																																														
Transportation and Material Moving Occupations (53-0000)	Satpati et al., 2020 ²⁷	n=63	Laborers and Freight, Stock, and Material Movers, Hand	Cross-sectional survey	07/26 - 08/08	India	12.7%	Moderate																																														
Not employed (mixed)*	Carrat et al., 2020 ⁴	n=6295	Unemployed	Prospective cohort	05/04 - 06/23	France	4.9% (4.1-5.6%)	Moderate																																														
Not employed (mixed)*	Carrat et al., 2020 ⁴	n=1457	Unemployed	Prospective cohort	05/04 - 06/23	France	8.3% (6.4-10%)	Moderate																																														
Not employed (mixed)*	Carrat et al., 2020 ⁴	n=306	Unemployed	Prospective cohort	05/04 - 06/23	France	7.2% (2.3-11.1%)	Moderate																																														
Not employed (mixed)*	Carrat et al., 2020 ⁴	n=125	Unemployed	Prospective cohort	05/04 - 06/23	France	3.8% (0.5-6.3%)	Moderate																																														
Not employed (mixed)*	Carrat et al., 2020 ⁴	n=402	Unemployed	Prospective cohort	05/04 - 06/23	France	7.8% (4.7-10.4%)	Moderate																																														

Not employed (mixed)*	Chamie et al., 2020 ¹⁹⁴	n=230	Unemployed	Cross-sectional survey	04/25 - 04/28	United States of America	4.3%	Moderate
Not employed (mixed)*	McLaughlin et al., 2020 ¹⁹⁵	n=241	Unemployed	Cross-sectional survey	05/04 - 05/19	United States of America	19.3% (14.6-24.5%)	Moderate
Not employed (mixed)*	Merkely et al., 2020 ¹	n=1095	Unemployed	Cross-sectional survey	05/01 - 05/16	Hungary	0.43% (0.16-0.84%)	Moderate
Not employed (mixed)*	Munoz et al., 2020 ¹⁹⁶	n=905	Unemployed	Cross-sectional survey	07/15 - 07/16	Argentina	20%	Moderate
Not employed (mixed)*	Richard et al., 2020 ⁵	n=549	Unemployed	Cross-sectional survey	04/06 - 06/30	Switzerland	6%	Low
Not employed (mixed)*	Satpati et al., 2020 ²⁷	n=47	Unemployed	Cross-sectional survey	07/26 - 08/08	India	2.13%	Moderate
Not employed (mixed)*	Ward et al., 2020 ¹¹³	n=59369	Unemployed	Cross-sectional survey	09/15 - 09/28	The United Kingdom	3.35%	Moderate

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4 **Supplementary File 2.**
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6 **Modified Joanna Briggs Institute Tool for assessing study risk of bias¹**
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Item 1: Was the sample frame appropriate to address the target population?	
Yes	Sample frame described and it approximated the target population
No	Sample frame did not approximate the target population (e.g., blood donors do not represent general population, doctors do not represent all health care providers)
Exclude	Sample frame not described
*Notes	The term “target population” should not be taken to infer every individual from everywhere or with similar disease or exposure characteristics. Instead, give consideration to specific population characteristics in the study, including age range, gender, morbidities, medications, and other potentially influential factors. For example, a sample frame may not be appropriate to address the target population if a certain group has been used (such as those working for one organisation, or one profession) and the results then inferred to the target population (i.e. working adults). A sample frame may be appropriate when it includes almost all the members of the target population (i.e. a census, or a complete list of participants or complete registry data).

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Item 2: Were study participants recruited in an appropriate way?	
Yes	Probability sampling method (simple or stratified random) or entire sample (e.g., an entire town) was used
No	Non-probability sampling
Exclude	Sampling method not reported

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Item 3: Was the sample size adequate?	
Yes	≥ 599
No	< 599

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Exclude	Sample size not reported
*Notes	<p>To calculate the required sample size we used an assumed prevalence of 2.5%, which was the global average estimated by the WHO in April, 2020.² Based on guidance by the Joanna Briggs Institute and published medical statistical recommendations we selected a precision value that was half the assumed prevalence (1.25%).^{1,3} We calculated a minimum sample size of 599 using these inputs:</p> <p>Sample size calculation:</p> $n = Z^2 P(1-P)/d^2$ <p>Where n = sample size; Z = Z statistic for level of confidence (95%); P = expected prevalence (2.5% WHO global estimate); d = precision (1.25%)</p> <p>In cases where the sample size calculation was provided and the required sample for 80% power was below our threshold (n<599), this item was marked as yes.</p>

Item 4: Were the study subjects and setting described in detail?	
Yes	Average age and distribution of gender/sex provided
No	Neither age or gender/sex is provided, or only one of age and gender/sex is provided

Item 5: Was data analysis conducted with sufficient coverage of the identified sample?	
Yes	The demographic characteristics (gender/sex, age, and ethnicity) of the sample is at least somewhat representative of the population
No	The demographic characteristics (gender/sex, age, and ethnicity) of the sample is not representative of the population
Unclear	Information is not provided about demographic characteristics of the sample (gender/sex, age, and ethnicity)

Item 6: Were valid methods used for the identification of the condition?

Yes	The test used met the FDA standards for Emergency Use Authorizations for COVID-19 serological tests: sensitivity minimum 90%, specificity minimum 95%, as reported in the study. ⁴
No	The test used did not meet the FDA standards for Emergency Use Authorizations for COVID-19 serological tests: sensitivity minimum 90%, specificity minimum 95%.
Exclude	Test sensitivity and specificity not reported

Item 7: Was the condition measured in a standard, reliable way for all participants?

Yes	The same serology test was used for all participants
No	Different serology tests were used for participants
Unclear	No details were provided about which participants received which serology tests

Item 8: Was there appropriate statistical analysis?

Yes	Does all of the following: corrects for population characteristics or the sample is somewhat representative of the population (probability sampling), corrects for test characteristics), and provides the information necessary to determine the numerator, denominator, prevalence estimate, and confidence interval.
No	Does not correct for population characteristics and the sample is not likely representative of the population (non-probability sampling), does not correct for test or provide the information necessary to correct for test characteristics, or does not provide the information necessary to determine the numerator, denominator, prevalence estimate, and confidence interval.

Item 9: Was the response rate adequate, and if not, was the low response rate managed appropriately?

Yes	Response rate > 60% or the demographics of the sample were a reasonable match to those of the target population ⁵
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No	Response rate < 60% and the demographics of the sample were not a reasonable match to those of the target population
Unclear	Response rate not provided and it was unclear if the demographics of the sample differed from the target population

Item 10: Overall risk of bias	
Low	The estimates are very likely correct for the target population. To obtain a low risk of bias classification, all criteria must be met or departures from the criteria must be minimal and unlikely to impact on the validity and reliability of the prevalence estimate. These include sample sizes that are just below the threshold when all other criteria are met, reporting only some of characteristics of the sample, test characteristics below the threshold but corrections for the test performance, and response rates that are just below the threshold in the context of probability based sampling of an appropriate sampling frame with population weighted seroprevalence estimates.
Moderate	The estimates are likely correct for the target population. To obtain a moderate risk of bias classification, most criteria must be met and departures from the criteria are likely to have only a small impact on the validity and reliability of the prevalence estimates.
High	The estimates are not likely correct for the target population. To obtain a high risk of bias, many criteria must not be met or departures from criteria are likely to have a major impact on the validity and reliability of the prevalence estimates.
Unclear	There was insufficient information to assess the risk of bias.

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Occupation and SARS-CoV-2 seroprevalence studies: a systematic review

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ABSTRACT

Objective. To describe and synthesize studies of SARS-CoV-2 seroprevalence by occupation prior to the widespread vaccine rollout.

Methods. We identified studies of occupational seroprevalence from a living systematic review (PROSPERO CRD42020183634). Electronic databases, gray literature, and news media were searched for studies published January-December 2020. Seroprevalence estimates and a free text description of the occupation were extracted and classified according to the Standard Occupational Classification (SOC) 2010 system using a machine-learning algorithm. Due to heterogeneity, results were synthesized narratively.

Results. We identified 196 studies including 591,940 participants from 38 countries. Most studies (n=162; 83%) were conducted locally vs regionally or nationally. Sample sizes were generally small (median=220 participants per occupation) and 135 studies (69%) were at a high risk of bias. One or more estimates were available for 21/23 major SOC occupation groups, but over half of the estimates identified (n=359/600) were for healthcare-related occupations. 'Personal Care and Service Occupations' (median 22% [IQR 9-28%]; n=14) had the highest median seroprevalence.

Conclusions. Many seroprevalence studies covering a broad range of occupations were published in the first year of the pandemic. Results suggest considerable differences in seroprevalence between occupations, although few large, high-quality studies were done. Well-designed studies are required to improve our understanding of the occupational risk of SARS-CoV-2 and should be considered as an element of pandemic preparedness for future respiratory pathogens.

1 **Strengths and limitations**

- 2 • We conducted a comprehensive search of the COVID-19 seroprevalence literature, including
- 3 non-English articles, government reports, unpublished data.
- 4 • Occupations were classified using the Standard Occupational Classification (SOC) 2010
- 5 coding system to improve interpretability and facilitate comparison with other datasets.
- 6 • Seroprevalence may underestimate the true prevalence of infection because antibody titres
- 7 decline over time, but where possible we prioritized prevalence estimates for IgG antibodies,
- 8 which appear to be more robust than other immunoglobulin types.
- 9 • We did not adjust for differences in serologic test performance.

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INTRODUCTION

Occupation is a social determinant of health and an important risk factor for SARS-CoV-2 infection. Essential workers in health and social care occupations have an increased risk of COVID-19 compared to non-essential workers, but the risks for other occupations are not well defined.¹⁻³ Studies examining confirmed COVID-19 cases to examine occupational COVID-19 risk are affected by variable testing rates. For example, testing rates may be higher in workplaces offering testing or paid sick leave, and are impacted by geographic (e.g., urban versus rural) and socio-economic factors (e.g., deprivation), potentially biasing results.⁴⁻⁶ Few high-quality, prospective studies using frequent, serial PCR or antigen testing covering a broad range of occupations having been conducted, in part due to the costs and administrative burden of such studies.^{7,8}

Serologic testing for SARS-CoV-2 antibodies provides evidence of previous infection and/or vaccination depending on vaccination status and the specific antigens targeted and can be used to obtain more accurate estimates of the cumulative incidence of infection.⁹ Accurate data on the occupational risks of COVID-19 and other respiratory infections are essential for informing the development of occupational safety guidelines and regulations, transmission control measures and resource allocation (testing, personal protective equipment (PPE), etc.). The objectives of this review were to describe and synthesize studies of SARS-CoV-2 seroprevalence across a broad range of occupations globally prior to the widespread rollout of vaccines.

METHODS

We identified studies of occupational seroprevalence from a living systematic review (PROSPERO CRD42020183634) of >1000 seroprevalence studies.¹⁰⁻¹² In brief, electronic databases, grey literature, and news media were searched for cohort or cross-sectional studies reporting antibody testing for SARS-CoV-2. Records were screened independently, in duplicate. We restricted eligibility to studies in English, French or that were machine-translatable using Google Translate and published January-December 2020 before vaccines were rolled-out, because differential vaccination rates by occupation would obscure results. We extracted seroprevalence estimates with a free-text description for each occupation. If multiple estimates were reported, the most recent estimate using laboratory-based methods (e.g. ELISA), and anti-spike and/or IgG antibodies were prioritized, because non-IgG and anti-nucleocapsid antibodies may decline more rapidly.¹³ Study-level risk of bias was assessed with a modified Joanna Briggs Institute Checklist for Prevalence Studies (**Supplementary File 1**).¹⁴

For each seroprevalence estimate, we identified the relevant Standard Occupational Classification (SOC) 2010 codes by applying the National Institute for Occupational Safety & Health (NIOSH) Industry and Occupation Computerized Coding System (NIOCCS) to occupation descriptions.¹⁵ NIOCCS was chosen, because many studies were conducted in the USA. Coding was manually verified if there was insufficient information for NIOCCS classification, or if the probability of correct classification to the six-digit level was <0.8 based on our review of a subset of the NIOCCS coded data (**Supplementary File 1**). Anticipating substantial heterogeneity and an insufficient number of estimates relative to covariates for meta-regression, we planned to summarize data using the median/IQR.

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61 **Patient and Public Involvement:** It was not possible or appropriate to involve patients or the
62 public in this study.

64 RESULTS

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66 We identified 196 studies of occupational seroprevalence conducted in 2020 during the first and
67 second waves of the pandemic (**Figure 1**). There were 591,940 participants from 38 countries,
68 including the USA (n=44 studies), UK (n=16) and Italy (n=15). Most studies (n=162; 83%) were
69 conducted locally (e.g. city, county) as opposed to regionally (e.g. state; n=20; 10%) or
70 nationally (n=14; 7%). Most were restricted to one occupational group (n=103), limiting direct
71 comparisons (i.e. using the same reference group). Sample sizes were often small (median=220,
72 IQR 64-568 participants). Overall, 135 studies (69%) were at a high risk of bias, 47 moderate
73 (24%), 2 low (1%) and 12 unclear (6%). Common reasons for bias were inadequate statistical
74 analysis (i.e. no adjustment for test or sample characteristics; 92%), non-probability sampling
75 (74%), and small sample-size (46%).

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77 At least one estimate was available for all 23 major SOC occupation groups, except for 'Legal'
78 and 'Military-Specific' occupations (**Figure 2**; all studies). Over half of the 600 estimates
79 identified (n=359) were for healthcare-related occupations. For SOC groups with three or more
80 estimates, the highest median seroprevalence was reported for 'Personal Care and Service
81 Occupations' (median 22% [IQR 9-28%]; n=14, e.g. 'Personal Care Aids'). The next highest was
82 reported for 'Building and Grounds Cleaning and Maintenance' occupations (11% [3-22%];
83 n=17, e.g. 'Maids and Housekeeping Cleaners'), and 'Healthcare Support' (11% [2-20%]; n=39,
84 e.g. 'Nursing Assistants') occupations. The lowest median seroprevalence was 1% (0-11%; n=6,

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3 85 e.g. ‘Athletes’) for ‘Arts, Design, Entertainment, Sports, and Media Occupations.’ Individual
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5 86 estimates are listed in **Supplementary File 2**.
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8 87 9 88 10 89 **DISCUSSION** 11 90

12 91 This review is the first comprehensive synthesis of occupational COVID-19 seroprevalence
13 92 studies world-wide. We identified 196 studies representing 21 out of 23 major SOC groups
14 93 conducted during the first and second waves of the SARS-CoV-2 pandemic in 2020, prior to the
15 94 widespread rollout of vaccines, and described occupational groups with high seroprevalence.
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17 96 Seroprevalence studies may estimate the cumulative incidence of infection more accurately than
18 97 diagnostic testing studies when access to testing and test performance are poor, and also can
19 98 identify asymptomatic infections.^{6,8} The data identified suggest considerable differences in
20 99 seroprevalence by occupation, though we did not statistically test for differences due to
21 100 considerable variation in geography, study dates and workplace determinants of infection (e.g.
22 101 PPE, ventilation). ‘Caring and Personal Service’ occupations had the highest median
23 102 seroprevalence (22%), which was four-times higher than the unemployed (5%) and median
24 103 seroprevalence across all occupational groups (5%). The UK Office for National Statistics
25 104 reported a slightly lower cumulative incidence for positive diagnostic or rapid tests for COVID-
26 105 19 across 25 occupational groups of 4% (mean),⁴ but the discrepancy between the true
27 106 cumulative incidence and confirmed infections is likely greater in regions with less access to
28 107 testing: national, population-based serosurveys have estimated there are 10-20 serologically
29 108 identifiable cases per one confirmed case.¹²
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3 110 In future pandemics, large, well-reported, high-quality seroprevalence studies across a broad
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5 111 range of occupations are needed at an early stage to inform appropriate workplace policy. It has
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8 112 been suggested that 20% of the US workforce was exposed to disease or infection at work at
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10 113 least once a month prior to the pandemic.¹⁶ Accurate data on the occupational risks of respiratory
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12 114 infections, including SARS-CoV-2 are needed to inform understanding of transmission,
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14 115 occupational health and safety agency guidelines and allocation of resources (e.g., personal
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16 116 protective equipment and vaccines) during outbreaks and pandemics. For governments, there are
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19 117 also issues of occupational disease recognition and compensation to be considered.
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24 119 As such, future population-based studies on respiratory infections should collect data on
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26 120 occupation. In the case of epidemic infection, collaboration between academic centres with the
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28 121 capacity to conduct large-scale studies and government agencies with expertise in disease
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30 122 surveillance and access to workplace data (e.g., public health, occupational health and safety)
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32 123 may be beneficial.¹² Other authors have suggested the utility of occupational surveillance
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34 124 systems.¹⁷ However, the routine completion of the occupation field in electronic health records
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36 125 would also serve this purpose as well as informing patient reported outcome measures.
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41 42 127 **Strengths and Limitations**

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44 128 Despite the large number of studies of occupational seroprevalence conducted, many studies had
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46 129 methodological limitations. Only two studies were at a low risk of bias and most occupational
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48 130 subgroups had small sample sizes (median 220 participants). Many were limited to one major
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50 131 SOC group (n=103 studies), which precluded comparisons. Detailed descriptions of occupations
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52 132 were often lacking, potentially contributing to coding errors and misclassification, and workplace
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55 133 determinants of infection (e.g. use of PPE) were poorly reported.
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5 135 In conclusion, our review shows that a large number of seroprevalence studies covering a broad
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7 136 range of occupations were published in the first year of the pandemic. Results suggest
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9 137 considerable differences in seroprevalence between occupations, although few large, well-
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11 138 reported, high-quality studies were done. Carefully-designed, adequately powered
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13 139 seroprevalence studies with coverage of a broad range of occupations could improve our
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15 140 understanding of the occupational risk of SARS-CoV-2 and other respiratory infections and
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17 141 should be considered an element of pandemic preparedness and response.
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144 **Funding Statement**

145 SeroTracker receives funding for SARS-CoV-2 seroprevalence study evidence synthesis from
146 the Public Health Agency of Canada through Canada's COVID-19 Immunity Task Force (Grant
147 Number 2021-HQ-000056), the World Health Organization Health Emergencies Programme, the
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149 source had any role in the design of this study, its execution, analyses, interpretation of the data,
150 or decision to submit results. This manuscript does not necessarily reflect the views of the World
151 Health Organization or any other funder.

152

153 **Statement of author's contributions**

154 This secondary analysis of the SeroTracker database was conceived by NB, EB, DK and AA.
155 Senior authors on this paper were NB, DK, RA and AA. The protocol was developed by EB, NB
156 and DK. Data cleaning was performed by CC, CD, NaD, SD and EB and verification by EB, SD,
157 ND and GB. Analysis was performed by EB and RA. The first draft of the manuscript was
158 written by EB and revised by EB, RA, NB, ND, GB, SD, CC, AA, DK. The SeroTracker
159 Consortium maintained the living systematic review database used in the study. All authors
160 reviewed and agreed to the findings, and also provided critical revisions to the paper.

161

162

163 **Disclosure of potential and actual conflicts of interest**

164 RKA was previously a Technical Consultant for the Bill and Melinda Gates Foundation Strategic
165 Investment Fund, is a minority shareholder of Alethea Medical, and was a former Senior Policy
166 Advisor at Health Canada. Each of these relationships is unrelated to the present work.

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2
3 168 JP reports grants to his institution from MedImmune, Sanofi Pasteur, Merck and AbbVie, and
4
5 169 personal fees for lectures from AbbVie and Astra-Zeneca, all outside of the submitted work.
6
7
8 170
9
10 171 MPC reports grants from McGill Interdisciplinary Initiative in Infection and Immunity, grants
11
12 172 from Canadian Institutes of Health Research, during the conduct of the study; personal fees from
13
14 173 GEn1E Lifesciences, personal fees from nplex biosciences, personal fees from Kanvas
15
16 174 biosciences, personal fees from AstraZeneca, non-financial support from Cidara therapeutics,
17
18 175 non-financial support from Scynexis, Inc., non-financial support from Amplyx Pharmaceuticals,
19
20 176 outside the submitted work. In addition, MPC has a patent for methods detecting tissue damage,
21
22 177 graft versus host disease, and infections using cell-free DNA profiling pending, a patent for
23
24 178 methods assessing the severity and progression of SARS-CoV-2 infections using cell-free DNA
25
26 179 pending, a patent for rapid identification of antimicrobial resistance and other microbial
27
28 180 phenotypes using highly-multiplexed fluorescence in situ hybridization pending, and a patent
29
30 181 highly multiplexed detection of gene expression with hybridization chain reaction pending, all
31
32 182 outside the submitted work.
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38 183
39 184 **Ethics approval:** Not applicable. This study did not involve human participants or animals.
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42 186 **Dating sharing:** Seroprevalence data can be downloaded (or requested) from
43 187 <https://serotracker.com>.
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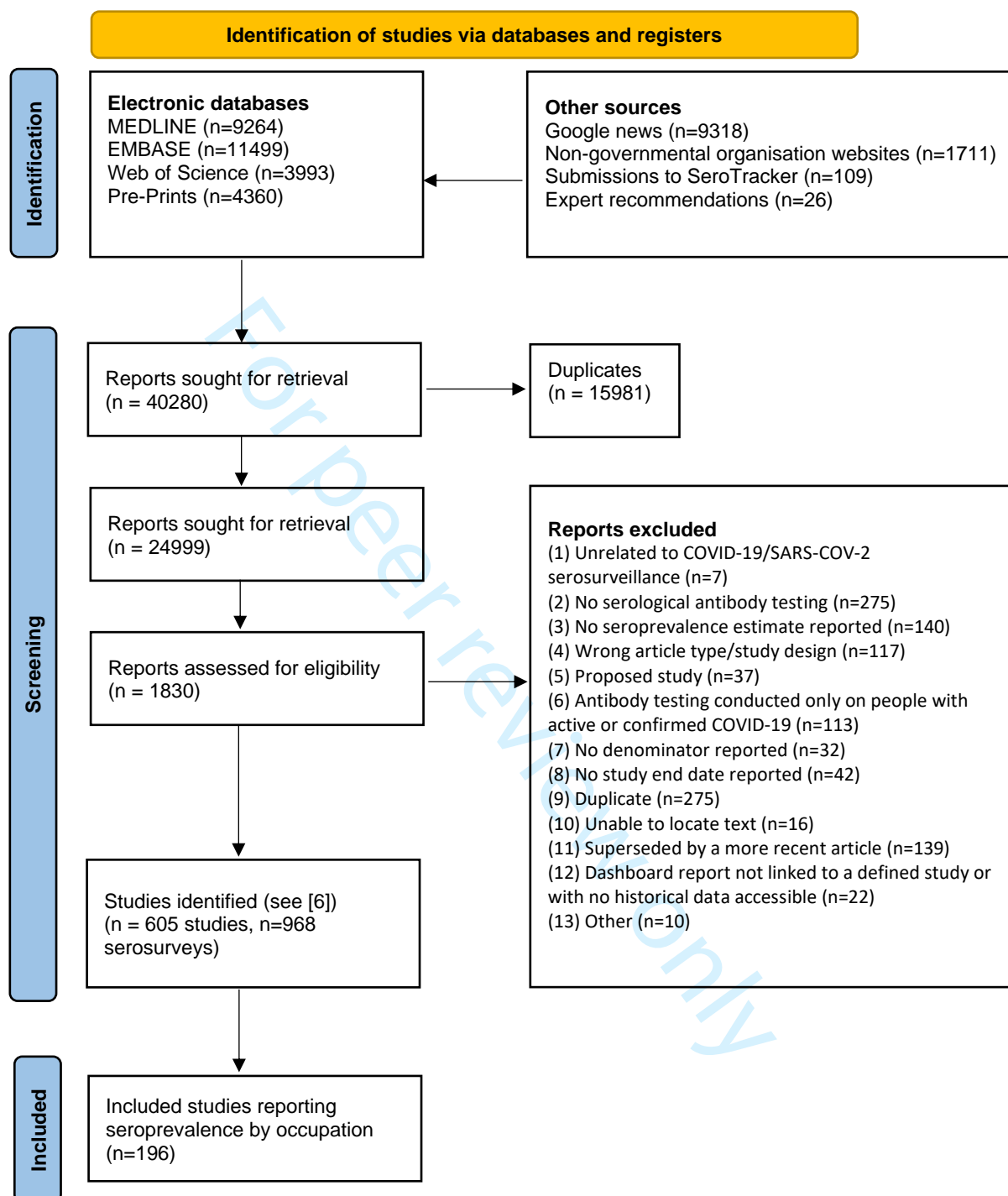
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3 **Figure Legends**
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8 **Figure 1.** PRISMA flow diagram
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12 **Figure 2.** Seroprevalence by SOC 2010 major occupation group. *Estimates are a mix of
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14 ‘Healthcare Practitioners and Technical Occupations’ and ‘Healthcare Support Occupations’ (see
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16 next page)
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21 **Supplementary File 1.** Supplementary methods
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24 **Supplementary File 2.** Summary of included studies and references
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From: Page MJ, McKenzie JE, Bossuyt PM, Boutron I, Hoffmann TC, Mulrow CD, et al. The PRISMA 2020 statement: an updated guideline for reporting systematic reviews. *BMJ* 2021;372:n71. doi: 10.1136/bmj.n71

For more information, visit: <http://www.prisma-statement.org/>

SOC 2010 Major Occupation Group	Total		BMJ Open	Median, IQR		Seroprevalence %		Page 18 of 119
	Estimates	Countries	Study dates, midpoint	Sample size	(Median, IQR)	(Scale 0-75%)	Low-Moderate RoB	
1 Architecture and Engineering Occupations (17-0000)	1	1	15/08 (15/08-15/08)	21 (21-21)	42.9 (42.9-42.9)		0 (0%)	
2 Personal Care and Service Occupations (39-0000)	14	7	03/05 (02/04-02/06)	127 (54-302)	21.5 (9.32-27.76)		3 (21%)	
3 Installation, Maintenance, and Repair Occupations (49-0000)	1	1	19/06 (19/06-19/06)	134 (134-134)	16.4 (16.4-16.4)		0 (0%)	
4 Building and Grounds Cleaning and Maintenance Occupations (37-0000)	17	8	13/07 (09/06-16/08)	102 (42-226)	10.8 (3.3-21.7)		6 (35%)	
5 Healthcare Support Occupations (31-0000)	39	12	05/06 (19/05-21/06)	263 (122-562)	10.7 (2-20.05)		12 (31%)	
6 Business and Financial Operations Occupations (13-0000)	2	2	05/07 (18/06-22/07)	462 (252-671)	8.27 (5.3-11.23)		2 (100%)	
8 Management Occupations (11-0000)	10	6	17/06 (01/05-02/08)	44 (23-145)	8.17 (6.7-19.93)		3 (30%)	
9 Food Preparation and Serving Related Occupations (35-0000)	6	4	17/06 (11/05-23/07)	58 (12-108)	6.35 (2.37-24.03)		2 (33%)	
10 Healthcare Practitioners and Technical Occupations (29-0000)	222	23	13/06 (13/05-13/07)	215 (64-482)	5.91 (1.83-11.71)		84 (38%)	
11 Healthcare Practitioners and Technical Occupations, 5-digit codes**								
12 Miscellaneous Health Technologists and Technicians	4	3	26/08 (09/08-12/09)	60 (20-121)	12.96 (9.09-27.54)		1 (25%)	
13 Registered Nurses	78	18	05/06 (05/05-05/07)	329 (71-1000)	8.44 (3.68-15.5)		22 (28%)	
14 Clinical Laboratory Technologists and Technicians	18	12	15/06 (19/05-11/07)	204 (86-284)	6.22 (2.07-11.94)		12 (67%)	
16 Physicians and Surgeons	65	21	09/06 (10/05-09/07)	214 (59-564)	5.88 (1.85-11.8)		23 (35%)	
17 Emergency Medical Technicians and Paramedics	9	6	13/06 (27/05-30/06)	157 (56-243)	5.41 (5.2-11)		4 (44%)	
18 Therapists	15	4	08/06 (19/05-28/06)	121 (61-235)	3.75 (0-9.45)		7 (47%)	
19 Physician Assistants	9	2	27/06 (26/05-28/07)	230 (156-320)	3.48 (0.64-9.43)		3 (33%)	
21 Pharmacists	9	7	29/06 (14/06-14/07)	113 (29-213)	0.5 (0-3.45)		4 (44%)	
22 Healthcare Occupations (mixed)*	94	25	05/06 (29/04-12/07)	375 (110-1012)	5.66 (2.35-11.6)		23 (24%)	
23 Sales and Related Occupations (41-0000)	23	8	21/08 (22/06-19/10)	643 (236-1184)	5.3 (1.2-8.8)		6 (26%)	
24 Education, Training, and Library Occupations (25-0000)	6	5	05/07 (12/06-27/07)	238 (73-1305)	5.07 (2.71-17.22)		3 (50%)	
25 Farming, Fishing, and Forestry Occupations (45-0000)	3	3	13/07 (25/06-30/07)	80 (66-100)	5 (2.5-5)		1 (33%)	
26 Not employed (mixed)*	37	14	23/06 (12/05-04/08)	382 (116-905)	4.9 (2.7-14.97)		28 (76%)	
28 Office and Administrative Support Occupations (43-0000)	39	18	14/06 (18/05-11/07)	120 (32-522)	4.88 (1.36-13.36)		20 (51%)	
29 First responders (mixed)*	6	1	18/05 (13/05-22/05)	219 (72-599)	4.67 (1.6-7.34)		1 (17%)	
30 Community and Social Service Occupations (21-0000)	6	2	30/05 (18/05-11/06)	104 (49-188)	4.45 (2.13-6.1)		1 (17%)	
32 Protective Service Occupations (33-0000)	28	9	04/07 (21/05-16/08)	190 (46-555)	4.29 (2.17-7.47)		6 (21%)	
33 Transportation and Material Moving Occupations (53-0000)	23	7	08/08 (08/06-08/10)	230 (80-364)	3.5 (1.8-11.8)		8 (35%)	
34 Life, Physical, and Social Science Occupations (19-0000)	11	7	06/07 (11/06-30/07)	343 (174-570)	2.6 (1.66-6.46)		4 (36%)	
35 Production Occupations (51-0000)	4	3	23/05 (26/04-19/06)	764 (342-1132)	1.52 (1.45-4.93)		2 (50%)	
36 Arts, Design, Entertainment, Sports, and Media Occupations (27-0000)	6	5	07/07 (04/06-09/08)	164 (47-823)	1.39 (0.18-11.02)		3 (50%)	
38 Computer and Mathematical Occupations (15-0000)	1	1	03/05 (03/05-03/05)	47 (47-47)	0 (0-0)		1 (100%)	
39 Construction and Extraction Occupations (47-0000)	1	1	03/05 (03/05-03/05)	42 (42-42)	0 (0-0)		1 (100%)	

S1 Materials

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For peer review only

12 **Supplementary files**
13 **S1 File. PRISMA checklist**

Section/topic	#	Checklist item	Reported on page #
TITLE			
Title	1	Identify the report as a systematic review, meta-analysis, or both.	0
ABSTRACT			
Structured summary	2	Provide a structured summary including, as applicable: background; objectives; data sources; study eligibility criteria, participants, and interventions; study appraisal and synthesis methods; results; limitations; conclusions and implications of key findings; systematic review registration number.	1
INTRODUCTION			
Rationale	3	Describe the rationale for the review in the context of what is already known.	3, lines 14-30
Objectives	4	Provide an explicit statement of questions being addressed with reference to participants, interventions, comparisons, outcomes, and study design (PICOS).	3, line 30-32
METHODS			
Protocol and registration	5	Indicate if a review protocol exists, if and where it can be accessed (e.g., Web address), and, if available, provide registration information including registration number.	3, line 39
Eligibility criteria	6	Specify study characteristics (e.g., PICOS, length of follow-up) and report characteristics (e.g., years considered, language, publication status) used as criteria for eligibility, giving rationale.	4, lines 39-45
Information sources	7	Describe all information sources (e.g., databases with dates of coverage, contact with study authors to identify additional studies) in the search and date last searched.	4, lines 39-40
Search	8	Present full electronic search strategy for at least one database, including any limits used, such that it could be repeated.	Suppl. File 2
Study selection	9	State the process for selecting studies (i.e., screening, eligibility, included in systematic review, and, if applicable, included in the meta-analysis).	4, lines 41-43
Data collection process	10	Describe method of data extraction from reports (e.g., piloted forms, independently, in duplicate) and any processes for obtaining and confirming data from investigators.	4, lines 41-49, 57-58
Data items	11	List and define all variables for which data were sought (e.g., PICOS, funding sources) and any assumptions and simplifications made.	4, lines 44-45 (see reference to previous study)
Risk of bias in individual studies	12	Describe methods used for assessing risk of bias of individual studies (including specification of whether this was done at the study or outcome level), and how this information is to be used in any data synthesis.	4, see reference and Suppl. File 1
Summary measures	13	State the principal summary measures (e.g., risk ratio, difference in means).	4, lines 57-78
Synthesis of results	14	Describe the methods of handling data and combining results of studies, if done, including measures of consistency (e.g., I^2) for each meta-analysis.	4, lines 57-58
Risk of bias across studies	15	Specify any assessment of risk of bias that may affect the cumulative evidence (e.g., publication bias, selective reporting within studies).	4, lines 47-48
Additional analyses	16	Describe methods of additional analyses (e.g., sensitivity or subgroup analyses, meta-regression), if done, indicating which were pre-specified.	NA
RESULTS			
Study selection	17	Give numbers of studies screened, assessed for eligibility, and included in the review, with reasons for exclusions at each stage, ideally with a flow diagram.	Suppl File 1
Study characteristics	18	For each study, present characteristics for which data were extracted (e.g., study size, PICOS, follow-up period) and provide the citations.	Suppl. File 2
Risk of bias within studies	19	Present data on risk of bias of each study and, if available, any outcome level assessment (see item 12).	Suppl. File 2
Results of individual studies	20	For all outcomes considered (benefits or harms), present, for each study: (a) simple summary data for each intervention group (b) effect estimates and confidence intervals, ideally with a forest plot.	Suppl. File 2
Synthesis of results	21	Present results of each meta-analysis done, including confidence intervals and measures of consistency.	NA – see narrative synthesis on page 5 & Figure 1
Risk of bias across studies	22	Present results of any assessment of risk of bias across studies (see Item 15).	5, lines 72-75 Figure 1
Additional analysis	23	Give results of additional analyses, if done (e.g., sensitivity or subgroup analyses, meta-regression [see Item 16]).	NA
DISCUSSION			
Summary of evidence	24	Summarize the main findings including the strength of evidence for each main outcome; consider their relevance to key groups (e.g., healthcare providers, users, and policy makers).	6, lines 110-118

Limitations	25	Discuss limitations at study and outcome level (e.g., risk of bias), and at review-level (e.g., incomplete retrieval of identified research, reporting bias).	6, lines 131-136
Conclusions	26	Provide a general interpretation of the results in the context of other evidence, and implications for future research.	6, lines 119-120
FUNDING			
Funding	27	Describe sources of funding for the systematic review and other support (e.g., supply of data); role of funders for the systematic review.	9

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S2 File. Search strategy

Database: Ovid MEDLINE(R) and Epub Ahead of Print, In-Process & Other Non-Indexed Citations and Daily

Dates: January 1, 2020 to December 31, 2020

Notes: Covid-19 search terms were adapted from Ovid Expert Searches

#	Search terms
1	exp Coronavirus/
2	exp Coronavirus Infections/
3	(coronavirus* or corona virus* or OC43 or NL63 or 229E or HKU1 or HCoV* or ncov* or covid* or sars-cov* or sarscov* or Sars-coronavirus* or Severe Acute Respiratory Syndrome Coronavirus*).tw,kf.[EB2]
4	or/1-3
5	4 not ((MERS or MERS-CoV or Middle East respiratory syndrome or camel* or dromedar* or equine or coronary or coronal or covidence* or covidien or influenza virus or HIV or bovine or calves or TGEV or feline or porcine or BCoV or PED or PEDV or PDCoV or FIPV or FCoV or SADS-CoV or canine or CCov or zoonotic or avian influenza or H1N1 or H5N1 or H5N6 or IBV).mp. or (animals/ not humans/))
6	((pneumonia or covid* or coronavirus* or corona virus* or ncov* or 2019-ncov or sars* or virus).tw,kf. or exp pneumonia/) and Wuhan.tw,kf.
7	(2019-ncov* or 2019nCov* or ncov19 or ncov-19 or 2019-novel CoV or sars-cov2* or sars-cov-2* or sarscov2* or sarscov-2* or Sars-coronavirus2 or Sars-coronavirus-2 or SARS-like coronavirus* or coronavirus 2 or coronavirus2* or corona or coronavirus-19 or covid19 or covid-19 or covid 2019 or ((novel or new or nouveau) adj2 (CoV or nCoV or covid or coronavirus* or corona virus or Pandemi*2)) or ((covid or covid19* or covid-19) and pandemic*2) or (coronavirus* and pneumonia)).tw,kf.
8	COVID-19.rx,px,ox. or severe acute respiratory syndrome coronavirus 2.os.
9	or/6-8
10	5 or 9
11	immunoglobulins/ or antibodies/ or antibodies, blocking/ or exp antibodies, neutralizing/ or antibodies, viral/ or antigen-antibody complex/ or immune sera/ or exp immunoglobulin isotypes/ or immunoglobulin a/ or immunoglobulin d/ or immunoglobulin e/ or immunoglobulin g/ or immunoglobulin m/
12	serologic tests/ or complement fixation tests/ or hemagglutination inhibition tests/ or neutralization tests/
13	immunoassay/ or fluoroimmunoassay/ or exp immunoblotting/ or immunoenzyme techniques/ or exp enzyme-linked immunosorbent assay/ or exp enzyme-linked immunosorbent assay/ or immunosorbent techniques/ or serologic tests/ or complement fixation tests/ or hemagglutination inhibition tests/ or neutralization tests/ or Serology/di
14	(enzyme linked immunosorbent or enzyme-linked immunosorbent or ELISA or immunofluorescence or complement fixation or hemagglutination inhibition or immunoblot or western blot or neutrali*).tw,kf.
15	(antibod* or immunoglobulin* or immune globulin* or titer* or isotype* or IgG or IgM or IgA or neutrali* or sera or serum or serolog* or saliva).tw,kf.
16	or/11-14
17	seroepidemiologic studies/
18	incidence/ or prevalence/
19	(seroconver* or seroprevalence or sero-prevalence or seroincidence or sero-incidence or seroepidemiolog* or sero-epidemiolog*).mp.
20	(inciden* or prevalen* or count* or rate*).mp.
21	(serosurvey or sero-survey or screen* or diagnostic).mp.
22	(seroconver* or seroprevalence or sero-prevalence or seroincidence or sero-incidence or seroepidemiolog* or sero-epidemiolog* or inciden* or prevalen* or silent or asymptomatic or serosurvey or sero-survey).tw,kf.
23	or/17-21
24	10 and (16 and 23)
25	10 and 15
26	10 and 22
27	or/24-26
28	limit 27 to yr="2020-Current"
29	remove duplicates from 28

Database: Embase**Dates:** January 1, 2020 to December 31, 2020**Notes:** Covid-19 search terms were adapted from Ovid Expert Searches

#	Searches
1	exp Coronavirus/
2	exp Coronavirus Infections/
3	(coronavirus* or corona virus* or OC43 or NL63 or 229E or HKU1 or HCoV* or nCoV* or covid* or sars-cov* or sarscov* or Sars-coronavirus* or Severe Acute Respiratory Syndrome Coronavirus*).tw,kw.
4	or/1-3
5	4 not ((MERS or MERS-CoV or Middle East respiratory syndrome or camel* or dromedar* or equine or coronary or coronal or coidence* or covidien or influenza virus or HIV or bovine or calves or TGEV or feline or porcine or BCoV or PED or PEDV or PDCoV or FIPV or FCoV or SADS-CoV or canine or CCov or zoonotic or avian influenza or H1N1 or H5N1 or H5N6 or IBV).mp. or (animals/ not humans/))
6	((pneumonia or covid* or coronavirus* or corona virus* or nCoV* or 2019-nCoV or sars*).tw,kw. or exp pneumonia/) and Wuhan.tw,kw.
7	(2019-nCoV or nCoV19 or nCoV-19 or 2019-novel CoV or sars-cov2 or sars-cov-2 or sarscov2 or sarscov-2 or Sars-coronavirus2 or Sars-coronavirus-2 or SARS-like coronavirus* or coronavirus-19 or covid19 or covid-19 or covid 2019 or ((novel or new or nouveau) adj2 (CoV or nCoV or covid or coronavirus* or corona virus or Pandemi*2)) or ((covid or covid19 or covid-19) and pandemic*2) or (coronavirus* and pneumonia)).tw,kw.
8	(coronavirus disease 2019 or severe acute respiratory syndrome coronavirus 2).sh,dj.
9	6 or 7 or 8
10	5 or 9
11	virus antibody/ec [Endogenous Compound]
12	neutralizing antibody/ec [Endogenous Compound]
13	exp immunoglobulin/ or exp immunoglobulin A antibody/ or exp immunoglobulin class/ or exp immunoglobulin M antibody/ or exp immunoglobulin G antibody/ or exp immunoglobulin antibody/
14	11 or 12 or 13
15	serology/
16	serodiagnosis/ or complement fixation test/ or hemagglutination inhibition test/ or hemolytic plaque assay/
17	fluorescent antibody technique/
18	immunofluorescence test/ or viral disease immunofluorescence assay/
19	enzyme linked immunosorbent assay/
20	western blotting/
21	(enzyme linked immunosorbent or enzyme-linked immunosorbent or ELISA or immunoassay or immunofluorescence or fluorescent antibody or complement fixation or hemagglutination inhibition or hemolytic plaque assay or immunoblot or western blot or neutrali*).tw,kw.
22	(antibod* or immunoglobulin* or immune globulin* or titer* or isotype* or IgG or IgM or IgA or neutrali* or sera or serolog* or serum or saliva).tw,kw.
23	15 or 16 or 17 or 18 or 19 or 20 or 21
24	14 or 23
25	exp seroepidemiology/
26	*prevalence/
27	*incidence/
28	(seroconver* or seroprevalence or sero-prevalence or seroincidence or sero-incidence or seroepidemiolog* or sero-epidemiolog* or inciden* or prevalen* or count* or rate* or serosurvey or sero-survey or screen* or diagnostic).mp.
29	(seroconver* or seroprevalence or sero-prevalence or seroincidence or sero-incidence or seroepidemiolog* or sero-epidemiolog* or inciden* or prevalen* or silent or asymptomatic or serosurvey or sero-survey).tw,kw.
30	25 or 26 or 27 or 28
31	10 and (24 and 30)
32	10 and 22
33	10 and 29
34	31 or 32 or 33
35	limit 34 to yr="2020-Current"
36	remove duplicates from 35

Database: Web of Science Core Collection

Date: January 1, 2020 to December 31, 2020

#	Searches
1	TS=(coronavirus* or corona virus* or OC43 or NL63 or 229E or HKU1 or HCoV* or ncov* or covid* or sars-cov* or sarscov* or Sars-coronavirus* or Severe Acute Respiratory Syndrome Coronavirus*)
2	TS=(MERS or MERS-CoV or Middle East respiratory syndrome or camel* or dromedar* or equine or coronary or coronal or coidence* or covidien or influenza virus or HIV or bovine or calves or TGEV or feline or porcine or BCoV or PED or PEDV or PDCoV or FIPV or FCoV or SADS-CoV or canine or CCov or zoonotic or avian influenza or H1N1 or H5N1 or H5N6 or IBV)
3	#1 NOT #2
4	TS=((pneumonia or covid* or coronavirus* or corona virus* or ncov* or 2019-ncov or sars* or virus) AND Wuhan)
5	TS=(2019-ncov* or 2019nCov* or ncov19 or ncov-19 or 2019-novel CoV or sars-cov2* or sars-cov-2* or sarscov2* or sarscov-2* or Sars-coronavirus2 or Sars-coronavirus-2 or SARS-like coronavirus* or corona or coronavirus-19 or covid19 or covid-19 or covid 2019 or ((novel or new or nouveau) adj2 (CoV or nCoV or covid or coronavirus*)) or (coronavirus* and pneumonia)).
6	TS=(COVID-19 or "severe acute respiratory syndrome coronavirus")
7	#6 OR #5 OR #4 OR #3
8	TS=(antibod* or immunoglobulin* or immune globulin* or titer* or isotype* or IgG or IgM or IgA or neutralization or sera or serolog* or saliva or serum).
9	TS=("enzyme linked immunosorbent assay" or "enzyme-linked immunosorbent assay" or "immunoenzyme" or ELISA or "lateral flow immunoassay" or LFIA or "immunofluorescence assay" or immunochromatography or "complement fixation test" or "hemagglutination inhibition" or immunoblot or "western blot" or "neutralization assay")
10	#9 OR #8
11	TI=(seroconversion or seroprevalence or seroincidence or seroepidemiolog* or incidence or prevalence or asymptomatic or sero-survey*) or AK=(seroconversion or seroprevalence or seroincidence or seroepidemiolog* or incidence or prevalence or asymptomatic or sero-survey*)
12	ALL=(prevalence or incidence or seroconversion or seroconvert or seroprevalence or seroincidence or seroepidemiolog* or serosurvey or sero-survey or survey or screen* or diagnostic test)
13	#12 AND #10 AND #7
14	#11 AND #7
15	TI=(antibod* or immunoglobulin* or immune globulin* or titer* or isotype* or IgG or IgM or IgA or neutralization or sera or serolog* or saliva or serum).
16	#15 AND #7
17	#16 OR #14 OR #13

Database: Europe PMC [Secondary search for pre-prints]

Dates: January 1, 2020 to December 31, 2020

#	Searches
	("2019-nCoV" OR "2019nCoV" OR "COVID-19" OR "SARS-CoV-2" OR "COVID19" OR "COVID" OR "SARS-nCoV" OR ("wuhan" AND "coronavirus") OR "Coronavirus" OR "Corona virus" OR "corona-virus" OR "corona viruses" OR "coronaviruses" OR "SARS-CoV" OR "Severe Acute Respiratory Syndrome Coronavirus" OR ("SARS" AND "coronavirus")) AND ABSTRACT:(sera* OR sero* OR immun* OR Ig* OR "enzyme-linked immunosorbent assay" OR ELISA OR "neutralization assay" OR seroprevalence) AND (SRC:"PPR")

Sources: Health organizations

Dates: January 1, 2020 to December 31, 2020

Source	Search strategy	
WHO Situation Reports	1	"antibod", "sero", "immun", "ELISA"
National Institutes of Health	1	("COVID" OR "SARS-CoV-2")
	2	("sero*" OR "antibod*" OR "immun*" OR "RDT" OR "ELISA" OR "LFIA")
	3	allintext:(1 AND 2) site:nih.gov -site:ncbi.nlm.nih.gov
	3	2 AND 3
United States Centres for Disease Control and Prevention	1	("COVID" OR "SARS-CoV-2")
	2	("sero*" OR "antibod*" OR "immun*" OR "RDT" OR "ELISA" OR "LFIA")
	3	allintext:(1 AND 2) site:cdc.gov
	5	2 AND 3
European Centres for Disease Control and Prevention	1	("COVID" OR "SARS-CoV-2")
	2	("sero*" OR "antibod*" OR "immun*" OR "RDT" OR "ELISA" OR "LFIA")
	3	allintext:(1 AND 2) site:ecdc.europa.eu
	5	2 AND 3

Sources: Google News

Dates: January 1, 2020 to December 31, 2020

Source	Search strategy	
Google news	1	(antibody OR antibodies OR surveillance OR screen OR serology OR serological OR serosurvey OR ELISA OR LFIA OR assay OR blood OR serum OR immune OR immunity OR herd immunity OR random test)

S3 File. Tool for assessing study risk of bias

Item 1: Was the sample frame appropriate to address the target population?	
Yes	Sample frame described and it approximated the target population
No	Sample frame did not approximate the target population (e.g., blood donors do not represent general population, doctors do not represent all health care providers)
Exclude	Sample frame not described
*Notes	The term “target population” should not be taken to infer every individual from everywhere or with similar disease or exposure characteristics. Instead, give consideration to specific population characteristics in the study, including age range, gender, morbidities, medications, and other potentially influential factors. For example, a sample frame may not be appropriate to address the target population if a certain group has been used (such as those working for one organisation, or one profession) and the results then inferred to the target population (i.e. working adults). A sample frame may be appropriate when it includes almost all the members of the target population (i.e. a census, or a complete list of participants or complete registry data).

Item 2: Were study participants recruited in an appropriate way?	
Yes	Probability sampling method (simple or stratified random) or entire sample (e.g., an entire town) was used
No	Non-probability sampling
Exclude	Sampling method not reported

Item 3: Was the sample size adequate?	
Yes	≥599
No	<599
Exclude	Sample size not reported
*Notes	<p>To calculate the required sample size we used an assumed prevalence of 2.5%, which was the global average estimated by the WHO in April, 2020.¹ Based on guidance by the Joanna Briggs Institute and published medical statistical recommendations we selected a precision value that was half the assumed prevalence (1.25%) [2,3]. We calculated a minimum sample size of 599 using these inputs:</p> <p>Sample size calculation: $n = \frac{Z^2 P(1-P)}{d^2}$</p> <p>Where n = sample size; Z = Z statistic for level of confidence (95%); P = expected prevalence (2.5% WHO global estimate); d = precision (1.25%)</p> <p>In cases where the sample size calculation was provided and the required sample for 80% power was below our threshold (n<599), this item was marked as yes.</p>

Item 4: Were the study subjects and setting described in detail?	
Yes	Average age and distribution of gender/sex provided
No	Neither age or gender/sex is provided, or only one of age and gender/sex is provided

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Item 5: Was data analysis conducted with sufficient coverage of the identified sample?	
Yes	The demographic characteristics (gender/sex, age, and ethnicity) of the sample is at least somewhat representative of the population
No	The demographic characteristics (gender/sex, age, and ethnicity) of the sample is not representative of the population
Unclear	Information is not provided about demographic characteristics of the sample (gender/sex, age, and ethnicity)

Item 6: Were valid methods used for the identification of the condition?	
Yes	The test used met the FDA standards for Emergency Use Authorizations for COVID-19 serological tests: sensitivity minimum 90%, specificity minimum 95%, as reported in the study [4].
No	The test used did not meet the FDA standards for Emergency Use Authorizations for COVID-19 serological tests: sensitivity minimum 90%, specificity minimum 95%.
Exclude	Test sensitivity and specificity not reported

Item 7: Was the condition measured in a standard, reliable way for all participants?	
Yes	The same serology test was used for all participants
No	Different serology tests were used for participants
Unclear	No details were provided about which participants received which serology tests

Item 8: Was there appropriate statistical analysis?	
Yes	Does all of the following: corrects for population characteristics or the sample is somewhat representative of the population (probability sampling), corrects for test characteristics), and provides the information necessary to determine the numerator, denominator, prevalence estimate, and confidence interval.
No	Does not correct for population characteristics and the sample is not likely representative of the population (non-probability sampling), does not correct for test or provide the information necessary to correct for test characteristics, or does not provide the information necessary to determine the numerator, denominator, prevalence estimate, and confidence interval.

Item 9: Was the response rate adequate, and if not, was the low response rate managed appropriately?	
Yes	Response rate > 60% or the demographics of the sample were a reasonable match to those of the target population [5]
No	Response rate < 60% and the demographics of the sample were not a reasonable match to those of the target population
Unclear	Response rate not provided and it was unclear if the demographics of the sample differed from the target population

Item 10: Overall risk of bias	
Low	The estimates are very likely correct for the target population. To obtain a low risk of bias classification, all criteria must be met or departures from the criteria must be minimal and unlikely to impact on the validity and reliability of the prevalence estimate. These include sample sizes that are just below the threshold when all other criteria are met,

	reporting only some of characteristics of the sample, test characteristics below the threshold but corrections for the test performance, and response rates that are just below the threshold in the context of probability based sampling of an appropriate sampling frame with population weighted seroprevalence estimates.
Moderate	The estimates are likely correct for the target population. To obtain a moderate risk of bias classification, most criteria must be met and departures from the criteria are likely to have only a small impact on the validity and reliability of the prevalence estimates.
High	The estimates are not likely correct for the target population. To obtain a high risk of bias, many criteria must not be met or departures from criteria are likely to have a major impact on the validity and reliability of the prevalence estimates.
Unclear	There was insufficient information to assess the risk of bias.

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2 **S5 File. Details of occupational coding**
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4 3 For each seroprevalence estimate, we identified the relevant Standard Occupational Classification
5 4 (SOC) 2010 codes. This was done by applying the National Institute for Occupational Safety & Health
6 5 (NIOSH) Industry and Occupation Computerized Coding System (NIOCCS) to text occupation
7 6 descriptions extracted by members of the research team. There is no standard cut-off for manually
8 7 verifying results from the National Institute for Occupational Safety & Health (NIOSH) Industry and
9 8 Occupation Computerized Coding System (NIOCCS). However, NIOCCS reports the probability of
10 9 correct classification to the six-digit level. After manually verifying a subset of records from the first
11 10 round of classification, we decided to manual perform a second round of classification for any
12 11 observations for which the probability of correct classification was <0.8 . This cut-off was chosen based
13 12 on the observation that that most codes with a probability of correct classification to of ≥ 0.8 to the
14 13 six-digit level were correctly coded at the two- and three-digit level, which we used in our main
15 14 analyses and are more likely to be coded correctly than the more granular, 6-digit codes and
16 15 consideration of the number of records that could feasibly be verified manually
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4 16 **References for supplementary files**

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Supplementary File I. List of all estimates, included studies and references

SOC 2010 Major Group	Study	N	SOC 2010 Occupation Title	Study Type	Study Dates	Country	Serum positive prevalence (95% CIs)	Overall Risk of Bias (JBI)
Not employed (mixed)*	Merkely et al., 2020 ¹	n=209	Homemaker (Unpaid)	Cross-sectional survey	05/01 - 05/16	Hungary	0.73% (0-1.74%)	Moderate
Not employed (mixed)*	Siddiqui et al., 2020 ²	n=37	Homemaker (Unpaid)	Prospective cohort	04/15 - 08/15	India	18.9%	High
Not employed (mixed)*	Biggs et al., 2020 ³	n=157	Retired (Unpaid)	Cross-sectional survey	04/28 - 05/03	United States of America	1.91%	Moderate
Not employed (mixed)*	Carrat et al., 2020 ⁴	n=5381	Retired (Unpaid)	Prospective cohort	05/04 - 06/23	France	4.3% (3.5-5%)	Moderate
Not employed (mixed)*	Merkely et al., 2020 ¹	n=2767	Retired (Unpaid)	Cross-sectional survey	05/01 - 05/16	Hungary	1.09% (0.66-1.52%)	Moderate
Not employed (mixed)*	Richard et al., 2020 ⁵	n=1635	Retired (Unpaid)	Cross-sectional survey	04/06 - 06/30	Switzerland	4.3%	Low
Not employed (mixed)*	Siddiqui et al., 2020 ²	n=10	Retired (Unpaid)	Prospective cohort	04/15 - 08/15	India	20%	High
Not employed (mixed)*	Alemu et al., 2020 ⁶	n=32	Student (Unpaid)	Cross-sectional survey	04/23 - 04/28	Ethiopia	15.6%	Moderate
Not employed (mixed)*	Biggs et al., 2020 ³	n=16	Student (Unpaid)	Cross-sectional survey	04/28 - 05/03	United States of America	12.5%	Moderate
Not employed (mixed)*	Brehm et al., 2020 ⁷	n=73	Student (Unpaid)	Cross sectional study with prospective cohort follow up of a subset of the sample	03/20 - 07/17	Germany	2.7%	Moderate
Not employed (mixed)*	Carrat et al., 2020 ⁴	n=81	Student (Unpaid)	Prospective cohort	05/04 - 06/23	France	7.2% (0.1-12.6%)	Moderate

Not employed (mixed)*	Iversen et al., 2020 ⁸	n=688	Student (Unpaid)	Cross-sectional survey	04/15 - 04/22	Denmark	14.97%	Low
Not employed (mixed)*	Lumley et al., 2020 ⁹	n=620	Student (Unpaid)	Prospective cohort	04/23 - 11/30	The United Kingdom	6.77%	Moderate
Not employed (mixed)*	Merkely et al., 2020 ¹	n=774	Student (Unpaid)	Cross-sectional survey	05/01 - 05/16	Hungary	0.69% (0-1.49%)	Moderate
Not employed (mixed)*	Richard et al., 2020 ⁵	n=666	Student (Unpaid)	Cross-sectional survey	04/06 - 06/30	Switzerland	10.5%	Low
Not employed (mixed)*	Shakiba et al., 2020 ¹⁰	n=114	Student (Unpaid)	Cross-sectional survey	04/11 - 04/19	Iran (Islamic Republic of)	17.5% (11.3-23.7%)	Moderate
Not employed (mixed)*	Siddiqui et al., 2020 ²	n=14	Student (Unpaid)	Prospective cohort	04/15 - 08/15	India	21.4%	High
Not employed (mixed)*	Tilley et al., 2020 ¹¹	n=790	Student (Unpaid)	Cross-sectional survey	04/29 - 05/08	United States of America	4% (3-5.1%)	Moderate
Not employed (mixed)*	Tsitsilonis et al., 2020 ¹²	n=1395	Student (Unpaid)	Cross-sectional survey	06/15 - 07/15	Greece	0.42% (0.03-1.5%)	Moderate
Not employed (mixed)*	Arnaldo et al., 2020 ¹³	n=513	Military, Rank Not Specified	Cross-sectional survey	07/06 - 07/13	Mozambique	3.7%	High
Not employed (mixed)*	Arnaldo et al., 2020 ¹⁴	n=116	Military, Rank Not Specified	Cross-sectional survey	11/02 - 11/12	Mozambique	1.7%	High
Not employed (mixed)*	Mabunda et al., 2020 ¹⁵	n=324	Military, Rank Not Specified	Cross-sectional survey	09/21 - 10/02	Mozambique	2.8%	High
Not employed (mixed)*	Mahomed et al., 2020 ¹⁶	n=116	Military, Rank Not Specified	Cross-sectional survey	11/26 - 12/03	Mozambique	18.1%	High
Not employed (mixed)*	Payne et al., 2020 ¹⁷	n=382	Military, Rank Not Specified	Cross-sectional survey	04/20 - 04/24	United States of America	59.7%	High
Not employed (mixed)*	World et al., 2020 ¹⁸	n=6900	Military, Rank Not Specified	Cross-sectional survey	08/15 - 10/15	Republic of Korea	0.36%	Unclear
Management Occupations (11-0000)	Shakiba et al., 2020 ¹⁰	n=16	Farmers, Ranchers, and Other Agricultural Managers	Cross-sectional survey	04/11 - 04/19	Iran (Islamic Republic of)	19.7% (9.1-31%)	Moderate
Management Occupations (11-	Favara et al., 2020 ¹⁹	n=43	Medical and Health Services Managers	Cross-sectional survey	07/13 - 07/13	The United Kingdom	9.3%	High

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Management Occupations (11-0000)	Galan et al., 2020 ²⁰	n=170	Medical and Health Services Managers	Cross-sectional survey	04/14 - 04/27	Spain	27.6%	High
Management Occupations (11-0000)	Hunter et al., 2020 ²¹	n=44	Medical and Health Services Managers	Cross-sectional survey	04/29 - 05/08	United States of America	4.55%	High
Management Occupations (11-0000)	Leidner et al., 2020 ²²	n=257	Medical and Health Services Managers	Cross sectional study with prospective cohort follow up of a subset of the sample	04/08 - 05/22	United States of America	3.11%	High
Management Occupations (11-0000)	Martin et al., 2020 ²³	n=2078	Medical and Health Services Managers	Cross-sectional survey	05/29 - 07/13	The United Kingdom	6.79%	Moderate
Management Occupations (11-0000)	Siddiqui et al., 2020 ²	n=15	Medical and Health Services Managers	Prospective cohort	04/15 - 08/15	India	20%	High
Management Occupations (11-0000)	Baracco et al., 2020 ²⁴	n=45	Managers, All Other	Cross-sectional survey	04/23 - 05/05	Italy	6.67%	High
Management Occupations (11-0000)	Goenka et al., 2020 ²⁵	n=71	Managers, All Other	Cross-sectional survey	07/12 - 08/23	India	7.04%	Moderate
Management Occupations (11-0000)	Goenka et al., 2020 ²⁶	n=13	Managers, All Other	Cross-sectional survey	08/01 - 08/31	India	38.46%	High
Business and Financial Operations Occupations (13-0000)	Satpati et al., 2020 ²⁷	n=43	Management Analysts	Cross-sectional survey	07/26 - 08/08	India	2.33%	Moderate
Business and Financial	Poustchi et al., 2020 ²⁸	n=880	Financial Specialists	Cross-sectional survey	04/17 - 06/02	Iran (Islamic Republic of)	14.2% (12.1-16.5%)	Moderate

Operations Occupations (13-0000)								
Computer and Mathematical Occupations (15-0000)	Biggs et al., 2020 ³	n=47	Computer User Support Specialists	Cross-sectional survey	04/28 - 05/03	United States of America	0%	Moderate
Architecture and Engineering Occupations (17-0000)	Siddiqui et al., 2020 ²	n=21	Engineers	Prospective cohort	04/15 - 08/15	India	42.9%	High
Life, Physical, and Social Science Occupations (19-0000)	Jones et al., 2020 ²⁹	n=245	Medical Scientists	Cross-sectional survey	01/15 - 06/15	The United Kingdom	1.9%	High
Life, Physical, and Social Science Occupations (19-0000)	Anna et al., 2020 ³⁰	n=505	Medical Scientists, Except Epidemiologists	Prospective cohort	04/28 - 07/31	France	8.71%	Moderate
Life, Physical, and Social Science Occupations (19-0000)	Erber et al., 2020 ³¹	n=635	Medical Scientists, Except Epidemiologists	Cross-sectional survey	04/14 - 05/29	Germany	1.24%	High
Life, Physical, and Social Science Occupations (19-0000)	Favara et al., 2020 ¹⁹	n=38	Medical Scientists, Except Epidemiologists	Cross-sectional survey	07/13 - 07/13	The United Kingdom	2.6%	High
Life, Physical, and Social Science Occupations (19-0000)	Hanrath et al., 2020 ³²	n=468	Medical Scientists, Except Epidemiologists	Cross-sectional survey	05/29 - 07/06	The United Kingdom	6.2%	High
Life, Physical, and Social Science Occupations (19-0000)	Leidner et al., 2020 ²²	n=2654	Medical Scientists, Except Epidemiologists	Cross sectional study with prospective cohort follow up of a subset of the sample	04/08 - 05/22	United States of America	2.22%	High

Life, Physical, and Social Science Occupations (19-0000)	Martin et al., 2020 ²³	n=1154	Medical Scientists, Except Epidemiologists	Cross-sectional survey	05/29 - 07/13	The United Kingdom	9.71%	Moderate
Life, Physical, and Social Science Occupations (19-0000)	Rosser et al., 2020 ³³	n=102	Medical Scientists, Except Epidemiologists	Cross-sectional survey	04/20 - 05/20	United States of America	0.98%	High
Life, Physical, and Social Science Occupations (19-0000)	Silva et al., 2020 ³⁴	n=69	Chemists	Cross-sectional survey	06/05 - 07/31	Brazil	4%	High
Life, Physical, and Social Science Occupations (19-0000)	Tsitsilonis et al., 2020 ¹²	n=250	Physical Scientists, All Other	Cross-sectional survey	06/15 - 07/15	Greece	1.42% (0-7.24%)	Moderate
Community and Social Service Occupations (21-0000)	Jones et al., 2020 ²⁹	n=211	Healthcare Social Workers	Cross-sectional survey	01/15 - 06/15	The United Kingdom	6.3%	High
Community and Social Service Occupations (21-0000)	Leidner et al., 2020 ²²	n=235	Social Workers, All Other	Cross sectional study with prospective cohort follow up of a subset of the sample	04/08 - 05/22	United States of America	3.4%	High
Community and Social Service Occupations (21-0000)	Rosser et al., 2020 ³³	n=117	Social Workers, All Other	Cross-sectional survey	04/20 - 05/20	United States of America	1.71%	High
Community and Social Service Occupations (21-0000)	Sabourin et al., 2020 ³⁵	n=91	Social Workers, All Other	Cross-sectional survey	07/15 - 08/15	United States of America	5.49%	High
Community and Social Service	Yogo et al., 2020 ³⁶	n=35	Social Workers, All Other	Cross-sectional survey	05/20 - 06/08	United States of America	0%	High

Occupations (21-0000)								
Community and Social Service Occupations (21-0000)	Biggs et al., 2020 ³	n=6	Religious Workers	Cross-sectional survey	04/28 - 05/03	United States of America	16.67%	Moderate
Education, Training, and Library Occupations (25-0000)	Campos et al., 2020 ³⁷	n=2715	Postsecondary Teachers	Cross-sectional survey	05/13 - 07/10	Portugal	2.6%	High
Education, Training, and Library Occupations (25-0000)	Goncalves et al., 2020 ³⁸	n=1636	Postsecondary Teachers	Cross-sectional survey	06/15 - 06/30	Portugal	3.05%	Moderate
Education, Training, and Library Occupations (25-0000)	Tsitsilonis et al., 2020 ¹²	n=312	Postsecondary Teachers	Cross-sectional survey	06/15 - 07/15	Greece	1.2% (0.14-3.7%)	Moderate
Education, Training, and Library Occupations (25-0000)	Fontanet et al., 2020 ³⁹	n=42	Elementary and Middle School Teachers	Retrospective cohort	04/28 - 04/30	France	7.1%	Moderate
Education, Training, and Library Occupations (25-0000)	Siddiqui et al., 2020 ²	n=8	Elementary and Middle School Teachers	Prospective cohort	04/15 - 08/15	India	25%	High
Education, Training, and Library Occupations (25-0000)	Torres et al., 2020 ⁴⁰	n=165	Elementary and Middle School Teachers	Cross-sectional survey	05/04 - 05/19	Chile	20.6% (14.7-27.6%)	High

1 2 3 4 5 6 7	Arts, Design, Entertainment, Sports, and Media Occupations (27-0000)	Halatoko et al., 2020 ⁴¹	n=55	Fine Artists, Including Painters, Sculptors, and Illustrators	Cross-sectional survey	04/23 - 05/08	Togo	0%	High
8 9 10 11 12 13	Arts, Design, Entertainment, Sports, and Media Occupations (27-0000)	Slusser et al., 2020 ⁴²	n=5603	Athletes, Coaches, Umpires, and Related Workers	Cross-sectional survey	04/08 - 04/21	United States of America	0.7% (0.28-1.15%)	Unclear
14 15 16 17 18	Arts, Design, Entertainment, Sports, and Media Occupations (27-0000)	Vince et al., 2020 ⁴³	n=272	Athletes, Coaches, Umpires, and Related Workers	Prospective cohort	05/29 - 07/31	Croatia	14%	Moderate
19 20 21 22 23	Arts, Design, Entertainment, Sports, and Media Occupations (27-0000)	Vince et al., 2020 ⁴³	n=43	Coaches and Scouts	Prospective cohort	05/29 - 07/31	Croatia	16.3%	Moderate
24 25 26 27 28	Arts, Design, Entertainment, Sports, and Media Occupations (27-0000)	Mack et al., 2020 ⁴⁴	n=1007	Umpires, Referees, and Other Sports Officials	Prospective cohort	06/16 - 06/30	Germany	2.09% (1.37-3.17%)	High
29 30 31 32 33	Arts, Design, Entertainment, Sports, and Media Occupations (27-0000)	Khan et al., 2020 ⁴⁵	n=44	Media and Communication Workers	Cross-sectional survey	07/01 - 07/15	India	0%	Moderate
34 35 36 37 38 39	Healthcare Practitioners and Technical Occupations (29-0000)	Akinbami et al., 2020 ⁴⁶	n=566	Healthcare Practitioners and Technical Occupations	Cross-sectional survey	05/18 - 06/13	United States of America	4.6% (3-6.7%)	Moderate

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Healthcare Practitioners and Technical Occupations (29-0000)	Khan et al., 2020 ⁴⁵	n=355	Healthcare Practitioners and Technical Occupations	Cross-sectional survey	07/01 - 07/15	India	4.8% (3-7.6%)	Moderate
Healthcare Practitioners and Technical Occupations (29-0000)	Leidner et al., 2020 ²²	n=402	Healthcare Practitioners and Technical Occupations	Cross sectional study with prospective cohort follow up of a subset of the sample	04/08 - 05/22	United States of America	1.49%	High
Healthcare Occupations (mixed)*	Hanrath et al., 2020 ³²	n=102	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	05/29 - 07/06	The United Kingdom	6.62%	High
Healthcare Occupations (mixed)*	Jones et al., 2020 ²⁹	n=413	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	01/15 - 06/15	The United Kingdom	7.8%	High
Healthcare Occupations (mixed)*	Martin et al., 2020 ²³	n=550	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	05/29 - 07/13	The United Kingdom	10.36%	Moderate
Healthcare Occupations (mixed)*	Amendola et al., 2020 ⁴⁷	n=117	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	04/15 - 04/15	Italy	4.27%	High
Healthcare Occupations (mixed)*	Arnaldo et al., 2020 ⁴⁸	n=543	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	08/10 - 08/21	Mozambique	3.7%	High

Healthcare Occupations (mixed)*	Bal et al., 2020 ⁴⁹	n=190	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	04/10 - 05/28	France	3.68%	High
Healthcare Occupations (mixed)*	Barallat et al., 2020 ⁵⁰	n=429	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	05/04 - 05/22	Spain	7.69%	High
Healthcare Occupations (mixed)*	Bardai et al., 2020 ⁵¹	n=35	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	06/10 - 07/27	Canada	11%	High
Healthcare Occupations (mixed)*	Bardai et al., 2020 ⁵¹	n=20	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	06/10 - 07/27	Canada	15%	High
Healthcare Occupations (mixed)*	Bardai et al., 2020 ⁵¹	n=44	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	06/10 - 07/27	Canada	11%	High
Healthcare Occupations (mixed)*	Bardai et al., 2020 ⁵¹	n=99	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	06/10 - 07/27	Canada	12%	High
Healthcare Occupations (mixed)*	Biggs et al., 2020 ³	n=59	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	04/28 - 05/03	United States of America	10.17%	Moderate

Healthcare Occupations (mixed)*	Blairon et al., 2020 ⁵²	n=588	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	05/25 - 06/19	Belgium	19.2%	High
Healthcare Occupations (mixed)*	Borraz et al., 2020 ⁵³	n=289	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Prospective cohort	03/20 - 04/21	Spain	5.88%	High
Healthcare Occupations (mixed)*	Brunner et al., 2020 ⁵⁴	n=762	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	05/04 - 05/29	United States of America	4.5%	High
Healthcare Occupations (mixed)*	Brunner et al., 2020 ⁵⁴	n=764	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	05/04 - 05/29	United States of America	2%	High
Healthcare Occupations (mixed)*	Carozzi et al., 2020 ⁵⁵	n=17098	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	04/01 - 04/30	Italy	3.1%	High
Healthcare Occupations (mixed)*	Carrat et al., 2020 ⁴	n=568	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Prospective cohort	05/04 - 06/23	France	11.6% (8.3-14.4%)	Moderate
Healthcare Occupations (mixed)*	Cavlek et al., 2020 ⁵⁶	n=558	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	04/25 - 05/24	Croatia	1.25%	High

Healthcare Occupations (mixed)*	Chibwana et al., 2020 ⁵⁷	n=500	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Prospective cohort	05/22 - 06/19	Malawi	12.3% (8.2-16.5%)	High
Healthcare Occupations (mixed)*	Coffman et al., 2020 ⁵⁸	n=1100	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	07/01 - 07/31	United States of America	2.2%	Unclear
Healthcare Occupations (mixed)*	Cooper et al., 2020 ⁵⁹	n=118	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	06/10 - 08/07	The United Kingdom	8.47%	Moderate
Healthcare Occupations (mixed)*	Cooper et al., 2020 ⁵⁹	n=27	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	06/10 - 08/07	The United Kingdom	14.81%	Moderate
Healthcare Occupations (mixed)*	Cooper et al., 2020 ⁵⁹	n=24	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	06/10 - 08/07	The United Kingdom	12.5%	Moderate
Healthcare Occupations (mixed)*	Cooper et al., 2020 ⁵⁹	n=1068	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	06/10 - 08/07	The United Kingdom	5.43%	Moderate
Healthcare Occupations (mixed)*	Cooper et al., 2020 ⁵⁹	n=174	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	06/10 - 08/07	The United Kingdom	5.75%	Moderate

Healthcare Occupations (mixed)*	Cooper et al., 2020 ⁵⁹	n=319	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	06/10 - 08/07	The United Kingdom	11.29%	Moderate
Healthcare Occupations (mixed)*	Cooper et al., 2020 ⁵⁹	n=5698	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	06/10 - 08/07	The United Kingdom	7.2%	Moderate
Healthcare Occupations (mixed)*	Cooper et al., 2020 ⁵⁹	n=412	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	06/10 - 08/07	The United Kingdom	4.61%	Moderate
Healthcare Occupations (mixed)*	Denyer et al., 2020 ⁶⁰	n=5850	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	05/12 - 05/18	Japan	1.79%	Unclear
Healthcare Occupations (mixed)*	Dimeglio et al., 2020 ⁶¹	n=8758	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	06/10 - 07/10	France	3.2% (2.8-3.5%)	High
Healthcare Occupations (mixed)*	Erber et al., 2020 ³¹	n=603	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	04/14 - 05/29	Germany	2.8%	High
Healthcare Occupations (mixed)*	Fuereder et al., 2020 ⁶²	n=62	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Retrospective cohort	04/01 - 06/04	Austria	3.2% (0.4-11.2%)	High

Healthcare Occupations (mixed)*	Fusco et al., 2020 ⁶³	n=115	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	03/23 - 04/02	Italy	1.74%	High
Healthcare Occupations (mixed)*	Geraci et al., 2020 ⁶⁴	n=230	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	03/16 - 05/20	United States of America	2.17%	High
Healthcare Occupations (mixed)*	Gudo et al., 2020 ⁶⁵	n=1427	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	06/17 - 06/30	Mozambique	7% (6-9%)	High
Healthcare Occupations (mixed)*	Hackner et al., 2020 ⁶⁶	n=130	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	04/01 - 04/30	Austria	2.3%	High
Healthcare Occupations (mixed)*	Halatoko et al., 2020 ⁴¹	n=370	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	04/23 - 05/08	Togo	1.4%	High
Healthcare Occupations (mixed)*	Haq et al., 2020 ⁶⁷	n=76	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	06/15 - 06/29	Pakistan	35.5% (24.8-47.3%)	Moderate
Healthcare Occupations (mixed)*	He et al., 2020 ⁶⁸	n=1059	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Repeated cross sectional study	05/13 - 06/10	China	9.3%	High

Healthcare Occupations (mixed)*	Herzberg et al., 2020 ⁶⁹	n=871	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Prospective cohort	04/14 - 06/16	Germany	2.64%	High
Healthcare Occupations (mixed)*	Jeremias et al., 2020 ⁷⁰	n=100	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	03/01 - 04/30	United States of America	12%	High
Healthcare Occupations (mixed)*	Jespersen et al., 2020 ⁷¹	n=17948	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	05/18 - 06/19	Denmark	3.36% (2.38-3.82%)	Moderate
Healthcare Occupations (mixed)*	Kassem et al., 2020 ⁷²	n=74	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	06/01 - 06/14	Egypt	12.2%	High
Healthcare Occupations (mixed)*	Kern et al., 2020 ⁷³	n=1316	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	04/09 - 04/16	Germany	1.06% (0.58-1.78%)	High
Healthcare Occupations (mixed)*	Khalil et al., 2020 ⁷⁴	n=190	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	05/15 - 05/28	The United Kingdom	22%	High
Healthcare Occupations (mixed)*	Kumar et al., 2020 ⁷⁵	n=635	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Repeated cross sectional study	07/11 - 07/24	India	0%	High

Healthcare Occupations (mixed)*	Lackermair et al., 2020 ⁷⁶	n=151	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	04/02 - 04/06	Germany	2.6% (0.8-7.1%)	High
Healthcare Occupations (mixed)*	Lahner et al., 2020 ⁷⁷	n=1084	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	04/07 - 04/27	Italy	0.7%	High
Healthcare Occupations (mixed)*	Liu et al., 2020 ⁷⁸	n=116	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	02/07 - 04/21	China	0%	High
Healthcare Occupations (mixed)*	Liu et al., 2020 ⁷⁸	n=304	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	02/07 - 04/21	China	0%	High
Healthcare Occupations (mixed)*	Liu et al., 2020 ⁷⁹	n=3832	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	02/29 - 04/29	China	4% (3.4-4.7%)	Moderate
Healthcare Occupations (mixed)*	Lorenzo et al., 2020 ⁸⁰	n=38	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	05/02 - 05/31	Italy	5.3%	High
Healthcare Occupations (mixed)*	Mahomed et al., 2020 ⁸¹	n=569	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	08/31 - 10/12	Mozambique	0.7%	High

Healthcare Occupations (mixed)*	Mahumane et al., 2020 ⁸²	n=380	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	11/02 - 11/17	Mozambique	1.3%	High
Healthcare Occupations (mixed)*	Majdoubi et al., 2020 ⁸³	n=276	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	05/17 - 06/19	Canada	0.6% (0-2.71%)	High
Healthcare Occupations (mixed)*	Majiya et al., 2020 ⁸⁴	n=185	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	06/26 - 06/30	Nigeria	25.41%	Moderate
Healthcare Occupations (mixed)*	Majiya et al., 2020 ⁸⁴	n=43	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	06/26 - 06/30	Nigeria	37.21%	Moderate
Healthcare Occupations (mixed)*	Malfertheiner et al., 2020 ⁸⁵	n=139	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Prospective cohort	03/15 - 06/07	Germany	0%	High
Healthcare Occupations (mixed)*	Martin et al., 2020 ⁸⁶	n=326	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	04/15 - 05/18	Belgium	11%	High
Healthcare Occupations (mixed)*	Martin et al., 2020 ²³	n=4631	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	05/29 - 07/13	The United Kingdom	13.65%	Moderate

Healthcare Occupations (mixed)*	Melo et al., 2020 ⁸⁷	n=471	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	06/01 - 06/30	Brazil	13.59%	High
Healthcare Occupations (mixed)*	Morcuende et al., 2020 ⁸⁸	n=6	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	03/01 - 04/21	United States of America	0%	High
Healthcare Occupations (mixed)*	Moscola et al., 2020 ⁸⁹	n=8156	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	04/20 - 06/23	United States of America	11.6%	High
Healthcare Occupations (mixed)*	Nishida et al., 2020 ⁹⁰	n=49	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	06/12 - 06/19	Japan	0%	Moderate
Healthcare Occupations (mixed)*	Olalla et al., 2020 ⁹¹	n=498	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	04/15 - 04/25	Spain	2.2%	High
Healthcare Occupations (mixed)*	Pallett et al., 2020 ⁹²	n=504	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Prospective cohort	04/08 - 06/12	The United Kingdom	10.6% (7.6-13.6%)	High
Healthcare Occupations (mixed)*	Pere et al., 2020 ⁹³	n=3569	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	05/02 - 06/26	France	11.9%	High

Healthcare Occupations (mixed)*	Poulikakos et al., 2020 ⁹⁴	n=281	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	05/04 - 05/06	The United Kingdom	6%	High
Healthcare Occupations (mixed)*	Psichogiou et al., 2020 ⁹⁵	n=1495	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	04/13 - 05/15	Greece	1.26% (0.43-3.26%)	Moderate
Healthcare Occupations (mixed)*	Satpati et al., 2020 ²⁷	n=18	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	07/26 - 08/08	India	5.56%	Moderate
Healthcare Occupations (mixed)*	Seetharam et al., 2020 ⁹⁶	n=728	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	08/16 - 08/29	India	27.3% (24.1-30.6%)	Unclear
Healthcare Occupations (mixed)*	Shakiba et al., 2020 ¹⁰	n=43	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	04/11 - 04/19	Iran (Islamic Republic of)	14.5% (4.5-25%)	Moderate
Healthcare Occupations (mixed)*	Shields et al., 2020 ⁹⁷	n=516	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	04/24 - 04/25	The United Kingdom	24.4%	High
Healthcare Occupations (mixed)*	Silva et al., 2020 ⁹⁸	n=61	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	04/09 - 04/29	Brazil	4.91%	High

Healthcare Occupations (mixed)*	Solodky et al., 2020 ⁹⁹	n=85	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	03/01 - 04/16	France	5.88%	High
Healthcare Occupations (mixed)*	Soriano et al., 2020 ¹⁰⁰	n=108	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Retrospective cohort	04/26 - 05/16	Spain	13%	High
Healthcare Occupations (mixed)*	Statistica et al., 2020 ¹⁰¹	n=64660	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	05/25 - 07/15	Italy	2.5%	Unclear
Healthcare Occupations (mixed)*	Steensels et al., 2020 ¹⁰²	n=3056	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	04/22 - 04/30	Belgium	6.4% (5.5-7.3%)	High
Healthcare Occupations (mixed)*	Stock et al., 2020 ¹⁰³	n=98	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	04/04 - 04/20	United States of America	15.3%	High
Healthcare Occupations (mixed)*	Takita et al., 2020 ¹⁰⁴	n=175	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	04/20 - 05/20	Japan	4% (1.62-8.07%)	High
Healthcare Occupations (mixed)*	Tong et al., 2020 ¹⁰⁵	n=191	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	05/12 - 05/15	China	0%	High

Healthcare Occupations (mixed)*	Trieu et al., 2020 ¹⁰⁶	n=607	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Prospective cohort	03/06 - 04/09	Norway	5.27%	High
Healthcare Occupations (mixed)*	Tu et al., 2020 ¹⁰⁷	n=325	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross sectional study with prospective cohort follow up of a subset of the sample	03/19 - 03/20	China	43.08%	High
Healthcare Occupations (mixed)*	Valdivia et al., 2020 ¹⁰⁸	n=1153	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	04/13 - 04/30	Spain	3.5%	High
Healthcare Occupations (mixed)*	Vasquez et al., 2020 ¹⁰⁹	n=1147	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	05/19 - 06/06	Peru	58.3%	High
Healthcare Occupations (mixed)*	Viegas et al., 2020 ¹¹⁰	n=1443	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	08/03 - 08/21	Mozambique	2.63%	High
Healthcare Occupations (mixed)*	Vlachoyiannopoulou et al., 2020 ¹¹¹	n=321	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	04/25 - 05/10	Greece	2.18%	High
Healthcare Occupations (mixed)*	Volta et al., 2020 ¹¹²	n=76	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	04/27 - 04/27	Italy	11.8%	High

Healthcare Occupations (mixed)*	Ward et al., 2020 ¹¹³	n=5416	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	09/15 - 09/28	The United Kingdom	10.67%	Moderate
Healthcare Occupations (mixed)*	Ward et al., 2020 ¹¹³	n=1692	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	09/15 - 09/28	The United Kingdom	6.68%	Moderate
Healthcare Occupations (mixed)*	Xiong et al., 2020 ¹¹⁴	n=797	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	02/12 - 03/17	China	4.39%	Unclear
Healthcare Occupations (mixed)*	Zhang et al., 2020 ¹¹⁵	n=63	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	01/21 - 02/16	China	0%	High
Healthcare Occupations (mixed)*	Zhao et al., 2020 ¹¹⁶	n=1060	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	01/14 - 02/21	China	8.3%	High
First responders (mixed)*	Ahmad et al., 2020 ¹¹⁷	n=40	Healthcare Practitioners and Technical Occupations and Protective Service Occupations (i.e. first responders)*	Cross-sectional survey	04/21 - 05/22	United States of America	20%	High
First responders (mixed)*	Halbrook et al., 2020 ¹¹⁸	n=679	Healthcare Practitioners and Technical Occupations and Protective Service Occupations (i.e. first responders)*	Cross-sectional survey	05/19 - 08/31	United States of America	8.1%	Moderate

1 2 3 4 5 6 7 8 9	First responders (mixed)*	Iwuji et al., 2020 ¹¹⁹	n=683	Healthcare Practitioners and Technical Occupations and Protective Service Occupations (i.e. first responders)*	Cross-sectional survey	05/12 - 05/13	United States of America	0.7%	High
10 11 12 13 14 15	First responders (mixed)*	Magyar et al., 2020 ¹²⁰	n=70	Healthcare Practitioners and Technical Occupations and Protective Service Occupations (i.e. first responders)*	Cross-sectional survey	05/01 - 05/14	United States of America	4.29%	High
16 17 18 19 20 21	First responders (mixed)*	Martinez et al., 2020 ¹²¹	n=79	Healthcare Practitioners and Technical Occupations and Protective Service Occupations (i.e. first responders)*	Cross-sectional survey	04/16 - 04/17	United States of America	5.06%	High
22 23 24 25 26 27	First responders (mixed)*	Staletovich et al., 2020 ¹²²	n=359	Healthcare Practitioners and Technical Occupations and Protective Service Occupations (i.e. first responders)*	Cross-sectional survey	05/17 - 05/22	United States of America	0%	Unclear
28 29 30 31 32	Healthcare Practitioners and Technical Occupations (29-0000)	Hibino et al., 2020 ¹²³	n=806	Health Diagnosing and Treating Practitioners	Cross-sectional survey	06/01 - 07/30	Japan	0.74% (0.27-1.61%)	Unclear
33 34 35 36 37	Healthcare Practitioners and Technical Occupations (29-0000)	Jones et al., 2020 ²⁹	n=856	Dentists, General	Cross-sectional survey	01/15 - 06/15	The United Kingdom	7.9%	High
38 39 40 41 42 43 44 45 46 47	Life, Physical, and Social Science	Calcagno et al., 2020 ¹²⁴	n=343	Life, Physical, and Social Science Occupations	Cross-sectional survey	04/17 - 05/20	Italy	6.71%	Moderate

Occupations (19-0000)								
Healthcare Practitioners and Technical Occupations (29-0000)	Goenka et al., 2020 ²⁵	n=49	Dietitians and Nutritionists	Cross-sectional survey	07/12 - 08/23	India	18.37%	Moderate
Healthcare Practitioners and Technical Occupations (29-0000)	Goenka et al., 2020 ²⁶	n=6	Dietitians and Nutritionists	Cross-sectional survey	08/01 - 08/31	India	0%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Akinbami et al., 2020 ⁴⁶	n=321	Pharmacists	Cross-sectional survey	05/18 - 06/13	United States of America	4.4% (2.4-7.2%)	Moderate
Healthcare Practitioners and Technical Occupations (29-0000)	Alharbi et al., 2020 ¹²⁵	n=5	Pharmacists	Cross-sectional survey	04/18 - 06/17	Saudi Arabia	0%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Calcagno et al., 2020 ¹²⁴	n=29	Pharmacists	Cross-sectional survey	04/17 - 05/20	Italy	3.45%	Moderate
Healthcare Practitioners and Technical Occupations (29-0000)	Chau et al., 2020 ¹²⁶	n=17	Pharmacists	Cross-sectional survey	08/23 - 08/30	Viet Nam	0%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Hanrath et al., 2020 ³²	n=189	Pharmacists	Cross-sectional survey	05/29 - 07/06	The United Kingdom	4.76%	High

Healthcare Practitioners and Technical Occupations (29-0000)	Khan et al., 2020 ¹²⁷	n=109	Pharmacists	Cross-sectional survey	06/15 - 06/29	India	0%	Moderate
Healthcare Practitioners and Technical Occupations (29-0000)	Mahomed et al., 2020 ⁸¹	n=404	Pharmacists	Cross-sectional survey	08/31 - 10/12	Mozambique	0.5%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Martin et al., 2020 ²³	n=113	Pharmacists	Cross-sectional survey	05/29 - 07/13	The United Kingdom	0%	Moderate
Healthcare Practitioners and Technical Occupations (29-0000)	Rosser et al., 2020 ³³	n=213	Pharmacists	Cross-sectional survey	04/20 - 05/20	United States of America	1.88%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Costa et al., 2020 ¹²⁸	n=652	Physicians and Surgeons	Cross-sectional survey	05/14 - 05/28	Brazil	5.8%	Moderate
Healthcare Practitioners and Technical Occupations (29-0000)	Mohr et al., 2020 ¹²⁹	n=372	Physicians and Surgeons	Cross-sectional survey	05/13 - 07/08	United States of America	1.61%	Moderate
Healthcare Practitioners and Technical Occupations (29-0000)	Nishida et al., 2020 ⁹⁰	n=63	Physicians and Surgeons	Cross-sectional survey	06/12 - 06/19	Japan	3.2% (0.88-11%)	Moderate
Healthcare Practitioners and	Noor et al., 2020 ¹³⁰	n=157	Physicians and Surgeons	Cross-sectional survey	07/13 - 07/15	Pakistan	17.83%	Moderate

Technical Occupations (29-0000)								
Healthcare Practitioners and Technical Occupations (29-0000)	Singhal et al., 2020 ¹³¹	n=208	Physicians and Surgeons	Cross-sectional survey	06/01 - 06/30	India	12.5%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Morcuende et al., 2020 ⁸⁸	n=23	Anesthesiologists	Cross-sectional survey	03/01 - 04/21	United States of America	13.04%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Morcuende et al., 2020 ⁸⁸	n=3	Obstetricians and Gynecologists	Cross-sectional survey	03/01 - 04/21	United States of America	100%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Urbietta et al., 2020 ¹³²	n=23	Pediatricians, General	Cross-sectional survey	04/14 - 04/16	Spain	4.3%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Iversen et al., 2020 ⁸	n=1944	Psychiatrists	Cross-sectional survey	04/15 - 04/22	Denmark	1.85%	Low
Healthcare Practitioners and Technical Occupations (29-0000)	Leidner et al., 2020 ²²	n=301	Surgeons	Cross sectional study with prospective cohort follow up of a subset of the sample	04/08 - 05/22	United States of America	2.66%	High
Healthcare Practitioners and Technical	Akinbami et al., 2020 ⁴⁶	n=2297	Physicians and Surgeons, All Other	Cross-sectional survey	05/18 - 06/13	United States of America	6.1% (5.1-7.1%)	Moderate

Occupations (29-0000)								
Healthcare Practitioners and Technical Occupations (29-0000)	Alharbi et al., 2020 ¹²⁵	n=18	Physicians and Surgeons, All Other	Cross-sectional survey	04/18 - 06/17	Saudi Arabia	27.78%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Amendola et al., 2020 ⁴⁷	n=214	Physicians and Surgeons, All Other	Cross-sectional survey	04/15 - 04/15	Italy	4.67%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Baracco et al., 2020 ²⁴	n=417	Physicians and Surgeons, All Other	Cross-sectional survey	04/23 - 05/05	Italy	17%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Barallat et al., 2020 ⁵⁰	n=1821	Physicians and Surgeons, All Other	Cross-sectional survey	05/04 - 05/22	Spain	11.81%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Bianchi et al., 2020 ¹³³	n=34	Physicians and Surgeons, All Other	Cross-sectional survey	04/15 - 05/15	Italy	5.88%	Unclear
Healthcare Practitioners and Technical Occupations (29-0000)	Blairon et al., 2020 ⁵²	n=323	Physicians and Surgeons, All Other	Cross-sectional survey	05/25 - 06/19	Belgium	11.8%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Brehm et al., 2020 ⁷	n=275	Physicians and Surgeons, All Other	Cross sectional study with prospective cohort follow up of a	03/20 - 07/17	Germany	3.3%	Moderate

				subset of the sample				
Healthcare Practitioners and Technical Occupations (29-0000)	Brousseau et al., 2020 ¹³⁴	n=432	Physicians and Surgeons, All Other	Cross-sectional survey	07/06 - 09/24	Canada	7.2%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Calcagno et al., 2020 ¹²⁴	n=700	Physicians and Surgeons, All Other	Cross-sectional survey	04/17 - 05/20	Italy	7.86%	Moderate
Healthcare Practitioners and Technical Occupations (29-0000)	Chau et al., 2020 ¹²⁶	n=64	Physicians and Surgeons, All Other	Cross-sectional survey	08/23 - 08/30	Viet Nam	0%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Chen et al., 2020 ¹³⁵	n=17	Physicians and Surgeons, All Other	Cross-sectional survey	02/19 - 02/19	China	41.18%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Erber et al., 2020 ³¹	n=860	Physicians and Surgeons, All Other	Cross-sectional survey	04/14 - 05/29	Germany	1.63%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Favara et al., 2020 ¹³⁶	n=15	Physicians and Surgeons, All Other	Prospective cohort	06/01 - 06/07	The United Kingdom	13.33%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Favara et al., 2020 ¹⁹	n=82	Physicians and Surgeons, All Other	Cross-sectional survey	07/13 - 07/13	The United Kingdom	10.9%	High

1 2 3 4 5 6 7	Healthcare Practitioners and Technical Occupations (29-0000)	Fujita et al., 2020 ¹³⁷	n=42	Physicians and Surgeons, All Other	Cross-sectional survey	04/10 - 04/20	Japan	4.7%	High
8 9 10 11 12 13	Healthcare Practitioners and Technical Occupations (29-0000)	Galan et al., 2020 ²⁰	n=564	Physicians and Surgeons, All Other	Cross-sectional survey	04/14 - 04/27	Spain	39.36%	High
14 15 16 17 18	Healthcare Practitioners and Technical Occupations (29-0000)	Godbout et al., 2020 ¹³⁸	n=490	Physicians and Surgeons, All Other	Cross-sectional survey	07/27 - 10/02	United States of America	1.43%	High
19 20 21 22 23	Healthcare Practitioners and Technical Occupations (29-0000)	Goenka et al., 2020 ²⁵	n=255	Physicians and Surgeons, All Other	Cross-sectional survey	07/12 - 08/23	India	3.92%	Moderate
24 25 26 27 28	Healthcare Practitioners and Technical Occupations (29-0000)	Goenka et al., 2020 ²⁶	n=29	Physicians and Surgeons, All Other	Cross-sectional survey	08/01 - 08/31	India	20.69%	High
29 30 31 32 33	Healthcare Practitioners and Technical Occupations (29-0000)	Hanrath et al., 2020 ³²	n=899	Physicians and Surgeons, All Other	Cross-sectional survey	05/29 - 07/06	The United Kingdom	7.01%	High
34 35 36 37 38	Healthcare Practitioners and Technical Occupations (29-0000)	Houlihan et al., 2020 ¹³⁹	n=72	Physicians and Surgeons, All Other	Cross-sectional survey	03/26 - 04/08	The United Kingdom	22%	High
39 40 41 42 43 44 45 46 47	Healthcare Practitioners and	Hunter et al., 2020 ²¹	n=279	Physicians and Surgeons, All Other	Cross-sectional survey	04/29 - 05/08	United States of America	1.08%	High

1	Technical Occupations (29-0000)								
2	Healthcare Practitioners and Technical Occupations (29-0000)	Insua et al., 2020 ¹⁴⁰	n=116	Physicians and Surgeons, All Other	Cross-sectional survey	06/08 - 06/09	Argentina	0.9% (0.1-5.5%)	High
3	Healthcare Practitioners and Technical Occupations (29-0000)	Iversen et al., 2020 ⁸	n=4698	Physicians and Surgeons, All Other	Cross-sectional survey	04/15 - 04/22	Denmark	4.07%	Low
4	Healthcare Practitioners and Technical Occupations (29-0000)	Iversen et al., 2020 ⁸	n=113	Physicians and Surgeons, All Other	Cross-sectional survey	04/15 - 04/22	Denmark	7.08%	Low
5	Healthcare Practitioners and Technical Occupations (29-0000)	Jeremias et al., 2020 ⁷⁰	n=79	Physicians and Surgeons, All Other	Cross-sectional survey	03/01 - 04/30	United States of America	11.4%	High
6	Healthcare Practitioners and Technical Occupations (29-0000)	Kassem et al., 2020 ⁷²	n=30	Physicians and Surgeons, All Other	Cross-sectional survey	06/01 - 06/14	Egypt	6.66%	High
7	Healthcare Practitioners and Technical Occupations (29-0000)	Kassem et al., 2020 ⁷²	n=30	Physicians and Surgeons, All Other	Cross-sectional survey	06/01 - 06/14	Egypt	3.33%	High
8	Healthcare Practitioners and Technical Occupations (29-0000)	Kassem et al., 2020 ⁷²	n=30	Physicians and Surgeons, All Other	Cross-sectional survey	06/01 - 06/14	Egypt	0%	High

Occupations (29-0000)								
Healthcare Practitioners and Technical Occupations (29-0000)	Kassem et al., 2020 ⁷²	n=30	Physicians and Surgeons, All Other	Cross-sectional survey	06/01 - 06/14	Egypt	3.33%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Khan et al., 2020 ¹²⁷	n=980	Physicians and Surgeons, All Other	Cross-sectional survey	06/15 - 06/29	India	2.8% (1.9-4%)	Moderate
Healthcare Practitioners and Technical Occupations (29-0000)	Kohler et al., 2020 ¹⁴¹	n=268	Physicians and Surgeons, All Other	Cross-sectional survey	03/19 - 04/03	Switzerland	1.49%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Kumar et al., 2020 ¹⁴²	n=201	Physicians and Surgeons, All Other	Cross-sectional survey	06/01 - 06/30	India	7% (4.2-11.4%)	High
Healthcare Practitioners and Technical Occupations (29-0000)	Leidner et al., 2020 ²²	n=1081	Physicians and Surgeons, All Other	Cross sectional study with prospective cohort follow up of a subset of the sample	04/08 - 05/22	United States of America	3.33%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Lumley et al., 2020 ⁹	n=1859	Physicians and Surgeons, All Other	Prospective cohort	04/23 - 11/30	The United Kingdom	10.11%	Moderate
Healthcare Practitioners and Technical	Martin et al., 2020 ²³	n=1243	Physicians and Surgeons, All Other	Cross-sectional survey	05/29 - 07/13	The United Kingdom	10.3%	Moderate

Occupations (29-0000)								
Healthcare Practitioners and Technical Occupations (29-0000)	Mesnil et al., 2020 ¹⁴³	n=111	Physicians and Surgeons, All Other	Cross-sectional survey	06/08 - 06/22	France	11%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Missaglia et al., 2020 ¹⁴⁴	n=377	Physicians and Surgeons, All Other	Cross-sectional survey	04/01 - 04/30	Italy	14.9%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Mohr et al., 2020 ¹²⁹	n=272	Physicians and Surgeons, All Other	Cross-sectional survey	05/13 - 07/08	United States of America	2.94%	Moderate
Healthcare Practitioners and Technical Occupations (29-0000)	Moscola et al., 2020 ⁸⁹	n=3746	Physicians and Surgeons, All Other	Cross-sectional survey	04/20 - 06/23	United States of America	8.7%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Nishida et al., 2020 ⁹⁰	n=149	Physicians and Surgeons, All Other	Cross-sectional survey	06/12 - 06/19	Japan	1.3% (0.37-4.8%)	Moderate
Healthcare Practitioners and Technical Occupations (29-0000)	Nishida et al., 2020 ⁹⁰	n=46	Physicians and Surgeons, All Other	Cross-sectional survey	06/12 - 06/19	Japan	0%	Moderate
Healthcare Practitioners and Technical Occupations (29-0000)	Nishida et al., 2020 ⁹⁰	n=40	Physicians and Surgeons, All Other	Cross-sectional survey	06/12 - 06/19	Japan	0%	Moderate

Healthcare Practitioners and Technical Occupations (29-0000)	Nishida et al., 2020 ⁹⁰	n=59	Physicians and Surgeons, All Other	Cross-sectional survey	06/12 - 06/19	Japan	1.7% (0.3-9%)	Moderate
Healthcare Practitioners and Technical Occupations (29-0000)	Nishida et al., 2020 ⁹⁰	n=925	Physicians and Surgeons, All Other	Cross-sectional survey	06/12 - 06/19	Japan	0.43% (0.17-1.1%)	Moderate
Healthcare Practitioners and Technical Occupations (29-0000)	Noor et al., 2020 ¹³⁰	n=303	Physicians and Surgeons, All Other	Cross-sectional survey	07/13 - 07/15	Pakistan	19.8%	Moderate
Healthcare Practitioners and Technical Occupations (29-0000)	Orth-Holler et al., 2020 ¹⁴⁵	n=377	Physicians and Surgeons, All Other	Cross-sectional survey	03/20 - 03/27	Austria	0.3% (0.01-1.5%)	High
Healthcare Practitioners and Technical Occupations (29-0000)	Plebani et al., 2020 ¹⁴⁶	n=2337	Physicians and Surgeons, All Other	Cross-sectional survey	02/22 - 05/29	Italy	3.6% (2.8-4.4%)	High
Healthcare Practitioners and Technical Occupations (29-0000)	Rosser et al., 2020 ³³	n=2533	Physicians and Surgeons, All Other	Cross-sectional survey	04/20 - 05/20	United States of America	1.07%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Rudberg et al., 2020 ¹⁴⁷	n=439	Physicians and Surgeons, All Other	Cross-sectional survey	04/14 - 05/08	Sweden	19.1%	Moderate
Healthcare Practitioners and	Schmidt et al., 2020 ¹⁴⁸	n=34	Physicians and Surgeons, All Other	Cross-sectional survey	04/20 - 04/30	Germany	8.82%	High

Technical Occupations (29-0000)								
Healthcare Practitioners and Technical Occupations (29-0000)	Sotgiu et al., 2020 ¹⁴⁹	n=115	Physicians and Surgeons, All Other	Cross-sectional survey	04/02 - 04/16	Italy	6.09%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Venugopal et al., 2020 ¹⁵⁰	n=157	Physicians and Surgeons, All Other	Cross-sectional survey	03/01 - 05/01	United States of America	25%	Moderate
Healthcare Practitioners and Technical Occupations (29-0000)	Yogo et al., 2020 ³⁶	n=110	Physicians and Surgeons, All Other	Cross-sectional survey	05/20 - 06/08	United States of America	1.82%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Brzostek et al., 2020 ¹⁵¹	n=998	Physician Assistants	Cross-sectional survey	04/17 - 05/07	United States of America	28.3%	Moderate
Healthcare Practitioners and Technical Occupations (29-0000)	Hoffmann et al., 2020 ¹⁵²	n=156	Physician Assistants	Prospective cohort	07/01 - 07/31	Germany	1.3%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Mohr et al., 2020 ¹²⁹	n=156	Physician Assistants	Cross-sectional survey	05/13 - 07/08	United States of America	0.64%	Moderate
Healthcare Practitioners and Technical	Morcuende et al., 2020 ⁸⁸	n=6	Physician Assistants	Cross-sectional survey	03/01 - 04/21	United States of America	9.43%	High

Occupations (29-0000)								
Healthcare Practitioners and Technical Occupations (29-0000)	Morcuende et al., 2020 ⁸⁸	n=53	Physician Assistants	Cross-sectional survey	03/01 - 04/21	United States of America	9.43%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Patel et al., 2020 ¹⁵³	n=230	Physician Assistants	Prospective cohort	06/02 - 06/27	United States of America	3.48%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Self et al., 2020 ¹⁵⁴	n=919	Physician Assistants	Cross-sectional survey	04/03 - 06/19	United States of America	5.66%	Moderate
Healthcare Practitioners and Technical Occupations (29-0000)	Shah et al., 2020 ¹⁵⁵	n=248	Physician Assistants	Cross-sectional survey	05/25 - 07/09	United States of America	0%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Shah et al., 2020 ¹⁵⁵	n=320	Physician Assistants	Cross-sectional survey	05/25 - 07/09	United States of America	0.63%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Lumley et al., 2020 ⁹	n=386	Occupational Therapists	Prospective cohort	04/23 - 11/30	The United Kingdom	11.4%	Moderate
Healthcare Practitioners and Technical Occupations (29-0000)	Akinbami et al., 2020 ⁴⁶	n=235	Physical Therapists	Cross-sectional survey	05/18 - 06/13	United States of America	10.6% (7-15.3%)	Moderate

Healthcare Practitioners and Technical Occupations (29-0000)	Brehm et al., 2020 ⁷	n=15	Physical Therapists	Cross sectional study with prospective cohort follow up of a subset of the sample	03/20 - 07/17	Germany	0%	Moderate
Healthcare Practitioners and Technical Occupations (29-0000)	Cooper et al., 2020 ⁵⁹	n=84	Physical Therapists	Cross-sectional survey	06/10 - 08/07	The United Kingdom	10.71%	Moderate
Healthcare Practitioners and Technical Occupations (29-0000)	Costa et al., 2020 ¹²⁸	n=159	Physical Therapists	Cross-sectional survey	05/14 - 05/28	Brazil	10.7%	Moderate
Healthcare Practitioners and Technical Occupations (29-0000)	Akinbami et al., 2020 ⁴⁶	n=409	Respiratory Therapists	Cross-sectional survey	05/18 - 06/13	United States of America	8.3% (5.8-11.4%)	Moderate
Healthcare Practitioners and Technical Occupations (29-0000)	Brunner et al., 2020 ⁵⁴	n=42	Respiratory Therapists	Cross-sectional survey	05/04 - 05/29	United States of America	0%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Godbout et al., 2020 ¹³⁸	n=25	Respiratory Therapists	Cross-sectional survey	07/27 - 10/02	United States of America	0%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Hunter et al., 2020 ²¹	n=94	Respiratory Therapists	Cross-sectional survey	04/29 - 05/08	United States of America	0%	High

Healthcare Practitioners and Technical Occupations (29-0000)	Rosser et al., 2020 ³³	n=135	Respiratory Therapists	Cross-sectional survey	04/20 - 05/20	United States of America	0%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Self et al., 2020 ¹⁵⁴	n=235	Respiratory Therapists	Cross-sectional survey	04/03 - 06/19	United States of America	4.26%	Moderate
Healthcare Practitioners and Technical Occupations (29-0000)	Yogo et al., 2020 ³⁶	n=121	Respiratory Therapists	Cross-sectional survey	05/20 - 06/08	United States of America	0%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Rosser et al., 2020 ³³	n=253	Therapists, All Other	Cross-sectional survey	04/20 - 05/20	United States of America	1.58%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Schmidt et al., 2020 ¹⁴⁸	n=80	Therapists, All Other	Cross-sectional survey	04/20 - 04/30	Germany	3.75%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Yogo et al., 2020 ³⁶	n=22	Therapists, All Other	Cross-sectional survey	05/20 - 06/08	United States of America	4.55%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Calcagno et al., 2020 ¹²⁴	n=13	Veterinarians	Cross-sectional survey	04/17 - 05/20	Italy	0%	Moderate
Healthcare Practitioners and	Akinbami et al., 2020 ⁴⁶	n=6426	Registered Nurses	Cross-sectional survey	05/18 - 06/13	United States of America	7.7% (7.1-8.4%)	Moderate

Technical Occupations (29-0000)								
Healthcare Practitioners and Technical Occupations (29-0000)	Alharbi et al., 2020 ¹²⁵	n=70	Registered Nurses	Cross-sectional survey	04/18 - 06/17	Saudi Arabia	10%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Alharbi et al., 2020 ¹²⁵	n=9	Registered Nurses	Cross-sectional survey	04/18 - 06/17	Saudi Arabia	33.33%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Alharbi et al., 2020 ¹²⁵	n=76	Registered Nurses	Cross-sectional survey	04/18 - 06/17	Saudi Arabia	26.32%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Alharbi et al., 2020 ¹²⁵	n=21	Registered Nurses	Cross-sectional survey	04/18 - 06/17	Saudi Arabia	14.29%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Alharbi et al., 2020 ¹²⁵	n=43	Registered Nurses	Cross-sectional survey	04/18 - 06/17	Saudi Arabia	27.91%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Amendola et al., 2020 ⁴⁷	n=216	Registered Nurses	Cross-sectional survey	04/15 - 04/15	Italy	6.02%	High
Healthcare Practitioners and Technical	Bampoe et al., 2020 ¹⁵⁶	n=52	Registered Nurses	Cross-sectional survey	05/11 - 06/05	The United Kingdom	13.5% (5.6-25.8%)	High

Occupations (29-0000)								
Healthcare Practitioners and Technical Occupations (29-0000)	Bampoe et al., 2020 ¹⁵⁶	n=40	Registered Nurses	Cross-sectional survey	05/11 - 06/05	The United Kingdom	12.5% (4.2-26.8%)	High
Healthcare Practitioners and Technical Occupations (29-0000)	Baracco et al., 2020 ²⁴	n=1014	Registered Nurses	Cross-sectional survey	04/23 - 05/05	Italy	17.9%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Barallat et al., 2020 ⁵⁰	n=2243	Registered Nurses	Cross-sectional survey	05/04 - 05/22	Spain	10.64%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Brehm et al., 2020 ⁷	n=444	Registered Nurses	Cross sectional study with prospective cohort follow up of a subset of the sample	03/20 - 07/17	Germany	2.3%	Moderate
Healthcare Practitioners and Technical Occupations (29-0000)	Brousseau et al., 2020 ¹³⁴	n=1189	Registered Nurses	Cross-sectional survey	07/06 - 09/24	Canada	11.9%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Calcagno et al., 2020 ¹²⁴	n=1833	Registered Nurses	Cross-sectional survey	04/17 - 05/20	Italy	8.18%	Moderate
Healthcare Practitioners and Technical	Chau et al., 2020 ¹²⁶	n=144	Registered Nurses	Cross-sectional survey	08/23 - 08/30	Viet Nam	0%	High

Occupations (29-0000)								
Healthcare Practitioners and Technical Occupations (29-0000)	Chen et al., 2020 ¹³⁵	n=25	Registered Nurses	Cross-sectional survey	02/19 - 02/19	China	8%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Cooper et al., 2020 ⁵⁹	n=3471	Registered Nurses	Cross-sectional survey	06/10 - 08/07	The United Kingdom	7.52%	Moderate
Healthcare Practitioners and Technical Occupations (29-0000)	Costa et al., 2020 ¹²⁸	n=370	Registered Nurses	Cross-sectional survey	05/14 - 05/28	Brazil	11.4%	Moderate
Healthcare Practitioners and Technical Occupations (29-0000)	Dimcheff et al., 2020 ¹⁵⁷	n=412	Registered Nurses	Cross-sectional survey	06/08 - 07/08	United States of America	7%	Moderate
Healthcare Practitioners and Technical Occupations (29-0000)	Erber et al., 2020 ³¹	n=958	Registered Nurses	Cross-sectional survey	04/14 - 05/29	Germany	2.5%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Favara et al., 2020 ¹³⁶	n=45	Registered Nurses	Prospective cohort	06/01 - 06/07	The United Kingdom	28.89%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Favara et al., 2020 ¹⁹	n=237	Registered Nurses	Cross-sectional survey	07/13 - 07/13	The United Kingdom	16.5%	High

Healthcare Practitioners and Technical Occupations (29-0000)	Finkenzeller et al., 2020 ¹⁵⁸	n=251	Registered Nurses	Prospective cohort	06/29 - 07/29	Germany	12%	Moderate
Healthcare Practitioners and Technical Occupations (29-0000)	Finkenzeller et al., 2020 ¹⁵⁸	n=887	Registered Nurses	Prospective cohort	06/29 - 07/29	Germany	20%	Moderate
Healthcare Practitioners and Technical Occupations (29-0000)	Fujita et al., 2020 ¹³⁷	n=50	Registered Nurses	Cross-sectional survey	04/10 - 04/20	Japan	6%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Galan et al., 2020 ²⁰	n=687	Registered Nurses	Cross-sectional survey	04/14 - 04/27	Spain	30.71%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Godbout et al., 2020 ¹³⁸	n=937	Registered Nurses	Cross-sectional survey	07/27 - 10/02	United States of America	1.39%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Goenka et al., 2020 ²⁵	n=224	Registered Nurses	Cross-sectional survey	07/12 - 08/23	India	9.38%	Moderate
Healthcare Practitioners and Technical Occupations (29-0000)	Goenka et al., 2020 ²⁶	n=43	Registered Nurses	Cross-sectional survey	08/01 - 08/31	India	34.88%	High
Healthcare Practitioners and	Grant et al., 2020 ¹⁵⁹	n=1345	Registered Nurses	Cross-sectional survey	05/15 - 06/05	The United Kingdom	34.7%	High

Technical Occupations (29-0000)								
Healthcare Practitioners and Technical Occupations (29-0000)	Grant et al., 2020 ¹⁵⁹	n=108	Registered Nurses	Cross-sectional survey	05/15 - 06/05	The United Kingdom	25%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Hanrath et al., 2020 ³²	n=749	Registered Nurses	Cross-sectional survey	05/29 - 07/06	The United Kingdom	8.99%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Haq et al., 2020 ⁶⁷	n=209	Registered Nurses	Cross-sectional survey	06/15 - 06/29	Pakistan	38.8% (32.1-45.7%)	Moderate
Healthcare Practitioners and Technical Occupations (29-0000)	Houlihan et al., 2020 ¹³⁹	n=106	Registered Nurses	Cross-sectional survey	03/26 - 04/08	The United Kingdom	24%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Houlihan et al., 2020 ¹³⁹	n=22	Registered Nurses	Cross-sectional survey	03/26 - 04/08	The United Kingdom	23%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Hunter et al., 2020 ²¹	n=317	Registered Nurses	Cross-sectional survey	04/29 - 05/08	United States of America	2.2%	High
Healthcare Practitioners and Technical	Iversen et al., 2020 ⁸	n=9963	Registered Nurses	Cross-sectional survey	04/15 - 04/22	Denmark	4.03%	Low

Occupations (29-0000)								
Healthcare Practitioners and Technical Occupations (29-0000)	Iversen et al., 2020 ⁸	n=1786	Registered Nurses	Cross-sectional survey	04/15 - 04/22	Denmark	4.65%	Low
Healthcare Practitioners and Technical Occupations (29-0000)	Jeremias et al., 2020 ⁷⁰	n=1043	Registered Nurses	Cross-sectional survey	03/01 - 04/30	United States of America	9.5%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Jones et al., 2020 ²⁹	n=1962	Registered Nurses	Cross-sectional survey	01/15 - 06/15	The United Kingdom	10.5%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Kassem et al., 2020 ⁷²	n=28	Registered Nurses	Cross-sectional survey	06/01 - 06/14	Egypt	10.71%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Kassem et al., 2020 ⁷²	n=28	Registered Nurses	Cross-sectional survey	06/01 - 06/14	Egypt	7.14%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Kassem et al., 2020 ⁷²	n=28	Registered Nurses	Cross-sectional survey	06/01 - 06/14	Egypt	3.57%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Kassem et al., 2020 ⁷²	n=28	Registered Nurses	Cross-sectional survey	06/01 - 06/14	Egypt	0%	High

Healthcare Practitioners and Technical Occupations (29-0000)	Khan et al., 2020 ¹²⁷	n=321	Registered Nurses	Cross-sectional survey	06/15 - 06/29	India	2.8% (1.5-5.3%)	Moderate
Healthcare Practitioners and Technical Occupations (29-0000)	Kohler et al., 2020 ¹⁴¹	n=398	Registered Nurses	Cross-sectional survey	03/19 - 04/03	Switzerland	0.75%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Kumar et al., 2020 ¹⁴²	n=308	Registered Nurses	Cross-sectional survey	06/01 - 06/30	India	6.8% (4.5-10.2%)	High
Healthcare Practitioners and Technical Occupations (29-0000)	Leidner et al., 2020 ²²	n=110	Registered Nurses	Cross sectional study with prospective cohort follow up of a subset of the sample	04/08 - 05/22	United States of America	0%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Leidner et al., 2020 ²²	n=3504	Registered Nurses	Cross sectional study with prospective cohort follow up of a subset of the sample	04/08 - 05/22	United States of America	2.34%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Lumley et al., 2020 ⁹	n=4528	Registered Nurses	Prospective cohort	04/23 - 11/30	The United Kingdom	13.21%	Moderate
Healthcare Practitioners and Technical Occupations (29-0000)	Mansour et al., 2020 ¹⁶⁰	n=285	Registered Nurses	Cross-sectional survey	03/24 - 04/04	United States of America	32.63%	High

1 2 3 4 5 6 7	Healthcare Practitioners and Technical Occupations (29-0000)	Martin et al., 2020 ¹⁶¹	n=580	Registered Nurses	Cross-sectional survey	04/01 - 04/15	Spain	5.52%	High
8 9 10 11 12	Healthcare Practitioners and Technical Occupations (29-0000)	Martin et al., 2020 ¹⁶¹	n=74	Registered Nurses	Cross-sectional survey	04/01 - 04/15	Spain	9.46%	High
13 14 15 16 17 18	Healthcare Practitioners and Technical Occupations (29-0000)	Martin et al., 2020 ¹⁶¹	n=676	Registered Nurses	Cross-sectional survey	04/01 - 04/15	Spain	5.92%	High
19 20 21 22 23	Healthcare Practitioners and Technical Occupations (29-0000)	Martin et al., 2020 ¹⁶¹	n=337	Registered Nurses	Cross-sectional survey	04/01 - 04/15	Spain	5.93%	High
24 25 26 27 28	Healthcare Practitioners and Technical Occupations (29-0000)	Martin et al., 2020 ¹⁶¹	n=339	Registered Nurses	Cross-sectional survey	04/01 - 04/15	Spain	5.9%	High
29 30 31 32 33	Healthcare Practitioners and Technical Occupations (29-0000)	Meissner et al., 2020 ¹⁶²	n=439	Registered Nurses	Cross-sectional survey	04/14 - 05/06	United States of America	1.37%	High
34 35 36 37 38	Healthcare Practitioners and Technical Occupations (29-0000)	Mohr et al., 2020 ¹²⁹	n=410	Registered Nurses	Cross-sectional survey	05/13 - 07/08	United States of America	1.46%	Moderate
39 40 41 42 43 44 45 46 47	Healthcare Practitioners and	Moscola et al., 2020 ⁸⁹	n=11468	Registered Nurses	Cross-sectional survey	04/20 - 06/23	United States of America	13.1%	High

Technical Occupations (29-0000)								
Healthcare Practitioners and Technical Occupations (29-0000)	Mostafa et al., 2020 ¹⁶³	n=4040	Registered Nurses	Cross-sectional survey	04/22 - 05/14	Egypt	1.31%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Nishida et al., 2020 ⁹⁰	n=489	Registered Nurses	Cross-sectional survey	06/12 - 06/19	Japan	0.2% (0.04-1.1%)	Moderate
Healthcare Practitioners and Technical Occupations (29-0000)	Noor et al., 2020 ¹³⁰	n=460	Registered Nurses	Cross-sectional survey	07/13 - 07/15	Pakistan	39.78%	Moderate
Healthcare Practitioners and Technical Occupations (29-0000)	Paradiso et al., 2020 ¹⁶⁴	n=606	Registered Nurses	Cross sectional study with prospective cohort follow up of a subset of the sample	03/26 - 04/17	Italy	0.33%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Plebani et al., 2020 ¹⁴⁶	n=3230	Registered Nurses	Cross-sectional survey	02/22 - 05/29	Italy	4.7% (4-5.5%)	High
Healthcare Practitioners and Technical Occupations (29-0000)	Poustchi et al., 2020 ²⁸	n=1245	Registered Nurses	Cross-sectional survey	04/17 - 06/02	Iran (Islamic Republic of)	15.9% (13.9-18%)	Moderate
Healthcare Practitioners and Technical	Rudberg et al., 2020 ¹⁴⁷	n=636	Registered Nurses	Cross-sectional survey	04/14 - 05/08	Sweden	21.9%	Moderate

Occupations (29-0000)								
Healthcare Practitioners and Technical Occupations (29-0000)	Schmidt et al., 2020 ¹⁴⁸	n=154	Registered Nurses	Cross-sectional survey	04/20 - 04/30	Germany	0%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Self et al., 2020 ¹⁵⁴	n=1445	Registered Nurses	Cross-sectional survey	04/03 - 06/19	United States of America	5.05%	Moderate
Healthcare Practitioners and Technical Occupations (29-0000)	Siddiqui et al., 2020 ²	n=59	Registered Nurses	Prospective cohort	04/15 - 08/15	India	10.2%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Siddiqui et al., 2020 ²	n=70	Registered Nurses	Prospective cohort	04/15 - 08/15	India	10%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Sotgiu et al., 2020 ¹⁴⁹	n=64	Registered Nurses	Cross-sectional survey	04/02 - 04/16	Italy	7.8% (1.2-14.4%)	High
Healthcare Practitioners and Technical Occupations (29-0000)	Sydney et al., 2020 ¹⁶⁵	n=81	Registered Nurses	Cross-sectional survey	04/28 - 05/04	United States of America	18.52%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Urbietta et al., 2020 ¹³²	n=83	Registered Nurses	Cross-sectional survey	04/14 - 04/16	Spain	4.8%	High

Healthcare Practitioners and Technical Occupations (29-0000)	Urbietta et al., 2020 ¹³²	n=23	Registered Nurses	Cross-sectional survey	04/14 - 04/16	Spain	8.7%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Venugopal et al., 2020 ¹⁵⁰	n=142	Registered Nurses	Cross-sectional survey	03/01 - 05/01	United States of America	28%	Moderate
Healthcare Practitioners and Technical Occupations (29-0000)	Yogo et al., 2020 ³⁶	n=1129	Registered Nurses	Cross-sectional survey	05/20 - 06/08	United States of America	2.48%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Yogo et al., 2020 ³⁶	n=12	Registered Nurses	Cross-sectional survey	05/20 - 06/08	United States of America	0%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Zhou et al., 2020 ¹⁶⁶	n=2406	Registered Nurses	Cross-sectional survey	03/16 - 03/25	China	1.37%	Moderate
Healthcare Practitioners and Technical Occupations (29-0000)	Godbout et al., 2020 ¹³⁸	n=141	Nurse Practitioners	Cross-sectional survey	07/27 - 10/02	United States of America	1.42%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Dimcheff et al., 2020 ¹⁵⁷	n=214	Nurse Practitioners	Cross-sectional survey	06/08 - 07/08	United States of America	3.7%	Moderate
Healthcare Practitioners and	Akinbami et al., 2020 ⁴⁶	n=719	Health Technologists and Technicians	Cross-sectional survey	05/18 - 06/13	United States of America	4.2% (2.8-5.9%)	Moderate

Technical Occupations (29-0000)								
Healthcare Practitioners and Technical Occupations (29-0000)	Blairon et al., 2020 ⁵²	n=61	Health Technologists and Technicians	Cross-sectional survey	05/25 - 06/19	Belgium	6.6%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Yogo et al., 2020 ³⁶	n=65	Health Technologists and Technicians	Cross-sectional survey	05/20 - 06/08	United States of America	4.62%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Silva et al., 2020 ³⁴	n=224	Clinical Laboratory Technologists and Technicians	Cross-sectional survey	06/05 - 07/31	Brazil	7.59%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Costa et al., 2020 ¹²⁸	n=66	Medical and Clinical Laboratory Technologists	Cross-sectional survey	05/14 - 05/28	Brazil	3%	Moderate
Healthcare Practitioners and Technical Occupations (29-0000)	Akinbami et al., 2020 ⁴⁶	n=293	Medical and Clinical Laboratory Technicians	Cross-sectional survey	05/18 - 06/13	United States of America	3.4% (1.7-6.2%)	Moderate
Healthcare Practitioners and Technical Occupations (29-0000)	Akinbami et al., 2020 ⁴⁶	n=365	Medical and Clinical Laboratory Technicians	Cross-sectional survey	05/18 - 06/13	United States of America	5.5% (3.4-8.3%)	Moderate
Healthcare Practitioners and Technical	Alharbi et al., 2020 ¹²⁵	n=80	Medical and Clinical Laboratory Technicians	Cross-sectional survey	04/18 - 06/17	Saudi Arabia	20%	High

Occupations (29-0000)								
Healthcare Practitioners and Technical Occupations (29-0000)	Baracco et al., 2020 ²⁴	n=256	Medical and Clinical Laboratory Technicians	Cross-sectional survey	04/23 - 05/05	Italy	12.1%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Brehm et al., 2020 ⁷	n=105	Medical and Clinical Laboratory Technicians	Cross sectional study with prospective cohort follow up of a subset of the sample	03/20 - 07/17	Germany	0%	Moderate
Healthcare Practitioners and Technical Occupations (29-0000)	Calcagno et al., 2020 ¹²⁴	n=216	Medical and Clinical Laboratory Technicians	Cross-sectional survey	04/17 - 05/20	Italy	6.94%	Moderate
Healthcare Practitioners and Technical Occupations (29-0000)	Calcagno et al., 2020 ¹²⁴	n=157	Medical and Clinical Laboratory Technicians	Cross-sectional survey	04/17 - 05/20	Italy	11.46%	Moderate
Healthcare Practitioners and Technical Occupations (29-0000)	Chau et al., 2020 ¹²⁶	n=33	Medical and Clinical Laboratory Technicians	Cross-sectional survey	08/23 - 08/30	Viet Nam	0%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Galan et al., 2020 ²⁰	n=192	Medical and Clinical Laboratory Technicians	Cross-sectional survey	04/14 - 04/27	Spain	21.35%	High
Healthcare Practitioners and Technical	Goenka et al., 2020 ²⁵	n=72	Medical and Clinical Laboratory Technicians	Cross-sectional survey	07/12 - 08/23	India	15.28%	Moderate

Occupations (29-0000)								
Healthcare Practitioners and Technical Occupations (29-0000)	Haq et al., 2020 ⁶⁷	n=32	Medical and Clinical Laboratory Technicians	Cross-sectional survey	06/15 - 06/29	Pakistan	50% (31.8-68.1%)	Moderate
Healthcare Practitioners and Technical Occupations (29-0000)	Iversen et al., 2020 ⁸	n=1292	Medical and Clinical Laboratory Technicians	Cross-sectional survey	04/15 - 04/22	Denmark	1.93%	Low
Healthcare Practitioners and Technical Occupations (29-0000)	Khan et al., 2020 ¹²⁷	n=397	Medical and Clinical Laboratory Technicians	Cross-sectional survey	06/15 - 06/29	India	2.5% (1.4-4.6%)	Moderate
Healthcare Practitioners and Technical Occupations (29-0000)	Lumley et al., 2020 ⁹	n=452	Medical and Clinical Laboratory Technicians	Prospective cohort	04/23 - 11/30	The United Kingdom	8.63%	Moderate
Healthcare Practitioners and Technical Occupations (29-0000)	Nishida et al., 2020 ⁹⁰	n=140	Medical and Clinical Laboratory Technicians	Cross-sectional survey	06/12 - 06/19	Japan	0%	Moderate
Healthcare Practitioners and Technical Occupations (29-0000)	Rosser et al., 2020 ³³	n=225	Medical and Clinical Laboratory Technicians	Cross-sectional survey	04/20 - 05/20	United States of America	0.44%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Iversen et al., 2020 ⁸	n=342	Radiologic Technologists	Cross-sectional survey	04/15 - 04/22	Denmark	3.51%	Low

Healthcare Practitioners and Technical Occupations (29-0000)	Martin et al., 2020 ²³	n=241	Radiologic Technologists	Cross-sectional survey	05/29 - 07/13	The United Kingdom	9.96%	Moderate
Healthcare Practitioners and Technical Occupations (29-0000)	Akinbami et al., 2020 ⁴⁶	n=1158	Emergency Medical Technicians and Paramedics	Cross-sectional survey	05/18 - 06/13	United States of America	5.2% (4-6.6%)	Moderate
Healthcare Practitioners and Technical Occupations (29-0000)	Buntinx et al., 2020 ¹⁶⁷	n=10	Emergency Medical Technicians and Paramedics	Cross-sectional survey	04/14 - 04/16	Belgium	10%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Haq et al., 2020 ⁶⁷	n=157	Emergency Medical Technicians and Paramedics	Cross-sectional survey	06/15 - 06/29	Pakistan	42% (34.2-50.1%)	Moderate
Healthcare Practitioners and Technical Occupations (29-0000)	Iversen et al., 2020 ⁸	n=323	Emergency Medical Technicians and Paramedics	Cross-sectional survey	04/15 - 04/22	Denmark	4.95%	Low
Healthcare Practitioners and Technical Occupations (29-0000)	Mesnil et al., 2020 ¹⁴³	n=212	Emergency Medical Technicians and Paramedics	Cross-sectional survey	06/08 - 06/22	France	11%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Reuben et al., 2020 ¹⁶⁸	n=10	Emergency Medical Technicians and Paramedics	Cross-sectional survey	05/28 - 07/15	United States of America	0%	High

Healthcare Practitioners and Technical Occupations (29-0000)	Saberian et al., 2020 ¹⁶⁹	n=243	Emergency Medical Technicians and Paramedics	Cross-sectional survey	03/20 - 05/20	Iran (Islamic Republic of)	41.56%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Self et al., 2020 ¹⁵⁴	n=56	Emergency Medical Technicians and Paramedics	Cross-sectional survey	04/03 - 06/19	United States of America	5.36%	Moderate
Healthcare Practitioners and Technical Occupations (29-0000)	Tarabichi et al., 2020 ¹⁷⁰	n=111	Emergency Medical Technicians and Paramedics	Cross-sectional survey	04/20 - 05/19	United States of America	5.41%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Baracco et al., 2020 ²⁴	n=188	Health Technologists and Technicians, All Other	Cross-sectional survey	04/23 - 05/05	Italy	13.8%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Chau et al., 2020 ¹²⁶	n=22	Health Technologists and Technicians, All Other	Cross-sectional survey	08/23 - 08/30	Viet Nam	0%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Goenka et al., 2020 ²⁵	n=99	Health Technologists and Technicians, All Other	Cross-sectional survey	07/12 - 08/23	India	12.12%	Moderate
Healthcare Practitioners and Technical Occupations (29-0000)	Goenka et al., 2020 ²⁶	n=16	Health Technologists and Technicians, All Other	Cross-sectional survey	08/01 - 08/31	India	68.75%	High
Healthcare Support	Jeremias et al., 2020 ⁷⁰	n=155	Healthcare Support Occupations	Cross-sectional survey	03/01 - 04/30	United States of America	5.8%	High

Occupations (31-0000)								
Healthcare Support Occupations (31-0000)	Ward et al., 2020 ¹¹³	n=979	Nursing, Psychiatric, and Home Health Aides	Cross-sectional survey	09/15 - 09/28	The United Kingdom	11.09% (8.96-13.59%)	Moderate
Healthcare Support Occupations (31-0000)	Ward et al., 2020 ¹¹³	n=257	Nursing, Psychiatric, and Home Health Aides	Cross-sectional survey	09/15 - 09/28	The United Kingdom	8.95%	Moderate
Healthcare Support Occupations (31-0000)	Vijh et al., 2020 ¹⁷¹	n=169	Nursing, Psychiatric, and Home Health Aides	Cross-sectional survey	05/04 - 05/14	Canada	26.63%	High
Healthcare Support Occupations (31-0000)	Akinbami et al., 2020 ⁴⁶	n=641	Nursing Assistants	Cross-sectional survey	05/18 - 06/13	United States of America	12.8% (10.3-15.6%)	Moderate
Healthcare Support Occupations (31-0000)	Bampoe et al., 2020 ¹⁵⁶	n=108	Nursing Assistants	Cross-sectional survey	05/11 - 06/05	The United Kingdom	15.7% (9.5-24%)	High
Healthcare Support Occupations (31-0000)	Baracco et al., 2020 ²⁴	n=257	Nursing Assistants	Cross-sectional survey	04/23 - 05/05	Italy	22.2%	High
Healthcare Support Occupations (31-0000)	Barallat et al., 2020 ⁵⁰	n=832	Nursing Assistants	Cross-sectional survey	05/04 - 05/22	Spain	13.94%	High
Healthcare Support Occupations (31-0000)	Bhattacharya et al., 2020 ¹⁷²	n=121	Nursing Assistants	Cross-sectional survey	06/01 - 06/15	United States of America	1.65%	High
Healthcare Support	Brousseau et al., 2020 ¹³⁴	n=132	Nursing Assistants	Cross-sectional survey	07/06 - 09/24	Canada	16.7%	High

Occupations (31-0000)								
Healthcare Support Occupations (31-0000)	Brunner et al., 2020 ⁵⁴	n=95	Nursing Assistants	Cross-sectional survey	05/04 - 05/29	United States of America	1.05%	High
Healthcare Support Occupations (31-0000)	Brzostek et al., 2020 ¹⁵¹	n=570	Nursing Assistants	Cross-sectional survey	04/17 - 05/07	United States of America	39.5%	Moderate
Healthcare Support Occupations (31-0000)	Brzostek et al., 2020 ¹⁵¹	n=263	Nursing Assistants	Cross-sectional survey	04/17 - 05/07	United States of America	45.6%	Moderate
Healthcare Support Occupations (31-0000)	Calcagno et al., 2020 ¹²⁴	n=476	Nursing Assistants	Cross-sectional survey	04/17 - 05/20	Italy	9.24%	Moderate
Healthcare Support Occupations (31-0000)	Costa et al., 2020 ¹²⁸	n=553	Nursing Assistants	Cross-sectional survey	05/14 - 05/28	Brazil	10.5%	Moderate
Healthcare Support Occupations (31-0000)	Galan et al., 2020 ²⁰	n=472	Nursing Assistants	Cross-sectional survey	04/14 - 04/27	Spain	33.26%	High
Healthcare Support Occupations (31-0000)	Garcia et al., 2020 ¹⁷³	n=2424	Nursing Assistants	Cross-sectional survey	05/01 - 05/30	Spain	22.4%	High
Healthcare Support Occupations (31-0000)	Garcia et al., 2020 ¹⁷⁴	n=2424	Nursing Assistants	Cross-sectional survey	05/01 - 05/30	Spain	22.4%	High
Healthcare Support	Hanrath et al., 2020 ³²	n=1434	Nursing Assistants	Cross-sectional survey	05/29 - 07/06	The United Kingdom	11.44%	High

Occupations (31-0000)								
Healthcare Support Occupations (31-0000)	Iversen et al., 2020 ⁸	n=501	Nursing Assistants	Cross-sectional survey	04/15 - 04/22	Denmark	1.2%	Low
Healthcare Support Occupations (31-0000)	Khan et al., 2020 ¹²⁷	n=624	Nursing Assistants	Cross-sectional survey	06/15 - 06/29	India	2.4% (1.5-4%)	Moderate
Healthcare Support Occupations (31-0000)	Mughal et al., 2020 ¹⁷⁵	n=121	Nursing Assistants	Cross-sectional survey	05/14 - 05/19	United States of America	0.83%	High
Healthcare Support Occupations (31-0000)	Rao et al., 2020 ¹⁷⁶	n=1000	Nursing Assistants	Cross-sectional survey	05/23 - 06/06	India	1%	Unclear
Healthcare Support Occupations (31-0000)	Rudberg et al., 2020 ¹⁴⁷	n=428	Nursing Assistants	Cross-sectional survey	04/14 - 05/08	Sweden	25.5%	Moderate
Healthcare Support Occupations (31-0000)	Siddiqui et al., 2020 ²	n=28	Nursing Assistants	Prospective cohort	04/15 - 08/15	India	10.7%	High
Healthcare Support Occupations (31-0000)	Yogo et al., 2020 ³⁶	n=154	Nursing Assistants	Cross-sectional survey	05/20 - 06/08	United States of America	3.24%	High
Healthcare Support Occupations (31-0000)	Brousseau et al., 2020 ¹³⁴	n=201	Orderlies	Cross-sectional survey	07/06 - 09/24	Canada	17.9%	High
Healthcare Support	Kassem et al., 2020 ⁷²	n=9	Orderlies	Cross-sectional survey	06/01 - 06/14	Egypt	0%	High

Occupations (31-0000)								
Healthcare Support Occupations (31-0000)	Kassem et al., 2020 ⁷²	n=9	Orderlies	Cross-sectional survey	06/01 - 06/14	Egypt	33.33%	High
Healthcare Support Occupations (31-0000)	Kassem et al., 2020 ⁷²	n=9	Orderlies	Cross-sectional survey	06/01 - 06/14	Egypt	11.11%	High
Healthcare Support Occupations (31-0000)	Kassem et al., 2020 ⁷²	n=9	Orderlies	Cross-sectional survey	06/01 - 06/14	Egypt	22.22%	High
Healthcare Support Occupations (31-0000)	Hanrath et al., 2020 ³²	n=122	Orderlies	Cross-sectional survey	05/29 - 07/06	The United Kingdom	9.02%	High
Healthcare Support Occupations (31-0000)	Lumley et al., 2020 ⁹	n=377	Orderlies	Prospective cohort	04/23 - 11/30	The United Kingdom	15.38%	Moderate
Healthcare Support Occupations (31-0000)	Rosser et al., 2020 ³³	n=3959	Medical Assistants	Cross-sectional survey	04/20 - 05/20	United States of America	1.39%	High
Healthcare Support Occupations (31-0000)	Yogo et al., 2020 ³⁶	n=106	Phlebotomists	Cross-sectional survey	05/20 - 06/08	United States of America	0%	High
Healthcare Support Occupations (31-0000)	Cavlek et al., 2020 ⁵⁶	n=300	Healthcare Support Workers, All Other	Cross-sectional survey	04/25 - 05/24	Croatia	0.67%	High
Healthcare Support	Erber et al., 2020 ³¹	n=383	Healthcare Support Workers, All Other	Cross-sectional survey	04/14 - 05/29	Germany	2.34%	High

Occupations (31-0000)								
Healthcare Support Occupations (31-0000)	Khan et al., 2020 ¹²⁷	n=141	Healthcare Support Workers, All Other	Cross-sectional survey	06/15 - 06/29	India	0%	Moderate
Protective Service Occupations (33-0000)	Shukla et al., 2020 ¹⁷⁷	n=1713	Protective Service Occupations	Cross-sectional survey	04/24 - 05/21	United States of America	1.46%	Moderate
Protective Service Occupations (33-0000)	Martinez et al., 2020 ¹²¹	n=18	First-Line Supervisors of Fire Fighting and Prevention Workers	Cross-sectional survey	04/16 - 04/17	United States of America	0%	High
Protective Service Occupations (33-0000)	Martinez et al., 2020 ¹²¹	n=47	First-Line Supervisors of Fire Fighting and Prevention Workers	Cross-sectional survey	04/16 - 04/17	United States of America	14.89%	High
Protective Service Occupations (33-0000)	Martinez et al., 2020 ¹²¹	n=13	First-Line Supervisors of Fire Fighting and Prevention Workers	Cross-sectional survey	04/16 - 04/17	United States of America	7.69%	High
Protective Service Occupations (33-0000)	Akinbami et al., 2020 ⁴⁶	n=330	Firefighters	Cross-sectional survey	05/18 - 06/13	United States of America	6.7% (4.2-9.9%)	Moderate
Protective Service Occupations (33-0000)	Gray et al., 2020 ¹⁷⁸	n=132	Firefighters	Cross-sectional survey	05/01 - 05/31	United States of America	14%	High
Protective Service Occupations (33-0000)	Reuben et al., 2020 ¹⁶⁸	n=62	Firefighters	Cross-sectional survey	05/28 - 07/15	United States of America	4.84%	High
Protective Service Occupations (33-0000)	Sabourin et al., 2020 ³⁵	n=42	Firefighters	Cross-sectional survey	07/15 - 08/15	United States of America	2.38%	High
Protective Service Occupations (33-0000)	Tarabichi et al., 2020 ¹⁷⁰	n=185	Firefighters	Cross-sectional survey	04/20 - 05/19	United States of America	5.41%	High

Protective Service Occupations (33-0000)	Martinez et al., 2020 ¹²¹	n=7	Fire Inspectors and Investigators	Cross-sectional survey	04/16 - 04/17	United States of America	14.29%	High
Protective Service Occupations (33-0000)	Akinbami et al., 2020 ⁴⁶	n=785	Police and Sheriff's Patrol Officers	Cross-sectional survey	05/18 - 06/13	United States of America	4% (2.7-5.6%)	Moderate
Protective Service Occupations (33-0000)	Chughtai et al., 2020 ¹⁷⁹	n=154	Police and Sheriff's Patrol Officers	Cross-sectional survey	05/20 - 05/30	Pakistan	15.6%	High
Protective Service Occupations (33-0000)	Gudo et al., 2020 ⁶⁵	n=564	Police and Sheriff's Patrol Officers	Cross-sectional survey	06/17 - 06/30	Mozambique	6% (4-8%)	High
Protective Service Occupations (33-0000)	Gujski et al., 2020 ¹⁸⁰	n=4026	Police and Sheriff's Patrol Officers	Cross-sectional survey	06/22 - 07/08	Poland	4.2%	Moderate
Protective Service Occupations (33-0000)	Halatoko et al., 2020 ⁴¹	n=196	Police and Sheriff's Patrol Officers	Cross-sectional survey	04/23 - 05/08	Togo	0%	High
Protective Service Occupations (33-0000)	Langa et al., 2020 ¹⁸¹	n=471	Police and Sheriff's Patrol Officers	Cross-sectional survey	09/28 - 10/09	Mozambique	1.5%	High
Protective Service Occupations (33-0000)	Macicame et al., 2020 ¹⁸²	n=456	Police and Sheriff's Patrol Officers	Cross-sectional survey	09/14 - 09/30	Mozambique	4.39%	High
Protective Service Occupations (33-0000)	Mahomed et al., 2020 ⁸¹	n=554	Police and Sheriff's Patrol Officers	Cross-sectional survey	08/31 - 10/12	Mozambique	2.9%	High
Protective Service Occupations (33-0000)	Reuben et al., 2020 ¹⁶⁸	n=220	Police and Sheriff's Patrol Officers	Cross-sectional survey	05/28 - 07/15	United States of America	3.64%	High
Protective Service Occupations (33-0000)	Sabourin et al., 2020 ³⁵	n=125	Police and Sheriff's Patrol Officers	Cross-sectional survey	07/15 - 08/15	United States of America	4%	High

Protective Service Occupations (33-0000)	Shukla et al., 2020 ¹⁷⁷	n=1643	Police and Sheriff's Patrol Officers	Cross-sectional survey	04/24 - 05/21	United States of America	1.52%	Moderate
Protective Service Occupations (33-0000)	Siddiqui et al., 2020 ²	n=27	Police and Sheriff's Patrol Officers	Prospective cohort	04/15 - 08/15	India	7.4%	High
Protective Service Occupations (33-0000)	Viegas et al., 2020 ¹¹⁰	n=559	Police and Sheriff's Patrol Officers	Cross-sectional survey	08/03 - 08/21	Mozambique	3.94%	High
Protective Service Occupations (33-0000)	Denyer et al., 2020 ⁶⁰	n=38216	Security Guards	Cross-sectional survey	05/12 - 05/18	Japan	0.23%	Unclear
Protective Service Occupations (33-0000)	Mahumane et al., 2020 ⁸²	n=407	Security Guards	Cross-sectional survey	11/02 - 11/17	Mozambique	4.9%	High
Protective Service Occupations (33-0000)	Siddiqui et al., 2020 ²	n=9	Security Guards	Prospective cohort	04/15 - 08/15	India	0%	High
Protective Service Occupations (33-0000)	Silva et al., 2020 ³⁴	n=32	Security Guards	Cross-sectional survey	06/05 - 07/31	Brazil	34%	High
Protective Service Occupations (33-0000)	Thani et al., 2020 ¹⁸³	n=61	Security Guards	Cross-sectional survey	07/26 - 09/09	Qatar	60.1%	Moderate
Food Preparation and Serving Related Occupations (35-0000)	Thani et al., 2020 ¹⁸³	n=93	Food Preparation and Serving Related Occupations	Cross-sectional survey	07/26 - 09/09	Qatar	29.2%	Moderate
Food Preparation and Serving Related Occupations (35-0000)	Siddiqui et al., 2020 ²	n=8	Cooks, All Other	Prospective cohort	04/15 - 08/15	India	37.5%	High
Food Preparation and Serving	Brunner et al., 2020 ⁵⁴	n=8	Food Preparation Workers	Cross-sectional survey	05/04 - 05/29	United States of America	0%	High

1	Related Occupations (35-0000)								
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4	Healthcare Support Occupations (31-0000)	Rosser et al., 2020 ³³	n=335	Healthcare Support Occupations	Cross-sectional survey	04/20 - 05/20	United States of America	3.58%	High
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7	Food Preparation and Serving Related Occupations (35-0000)	Biggs et al., 2020 ³	n=24	Food Servers, Nonrestaurant	Cross-sectional survey	04/28 - 05/03	United States of America	4.17%	Moderate
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11	Food Preparation and Serving Related Occupations (35-0000)	Leidner et al., 2020 ²²	n=113	Food Servers, Nonrestaurant	Cross sectional study with prospective cohort follow up of a subset of the sample	04/08 - 05/22	United States of America	1.77%	High
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16	Food Preparation and Serving Related Occupations (35-0000)	Hanrath et al., 2020 ³²	n=340	Other Food Preparation and Serving Related Workers	Cross-sectional survey	05/29 - 07/06	The United Kingdom	8.53%	High
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22	Building and Grounds Cleaning and Maintenance Occupations (37-0000)	Martin et al., 2020 ²³	n=528	Building and Grounds Cleaning and Maintenance Occupations	Cross-sectional survey	05/29 - 07/13	The United Kingdom	8.14%	Moderate
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27	Building and Grounds Cleaning and Maintenance Occupations (37-0000)	Brousseau et al., 2020 ¹³⁴	n=102	Building Cleaning and Pest Control Workers	Cross-sectional survey	07/06 - 09/24	Canada	10.8%	High
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32	Building and Grounds Cleaning and Maintenance Occupations (37-0000)	Chau et al., 2020 ¹²⁶	n=42	Building Cleaning and Pest Control Workers	Cross-sectional survey	08/23 - 08/30	Viet Nam	0%	High
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Occupations (37-0000)								
Building and Grounds Cleaning and Maintenance Occupations (37-0000)	Finkenzeller et al., 2020 ¹⁵⁸	n=57	Building Cleaning and Pest Control Workers	Prospective cohort	06/29 - 07/29	Germany	19.3%	Moderate
Building and Grounds Cleaning and Maintenance Occupations (37-0000)	Chau et al., 2020 ¹²⁶	n=6	Janitors and Cleaners, Except Maids and Housekeeping Cleaners	Cross-sectional survey	08/23 - 08/30	Viet Nam	0%	High
Building and Grounds Cleaning and Maintenance Occupations (37-0000)	Epstude et al., 2020 ¹⁸⁴	n=45	Janitors and Cleaners, Except Maids and Housekeeping Cleaners	Cross-sectional survey	06/15 - 06/30	Germany	0%	High
Building and Grounds Cleaning and Maintenance Occupations (37-0000)	Thani et al., 2020 ¹⁸³	n=105	Janitors and Cleaners, Except Maids and Housekeeping Cleaners	Cross-sectional survey	07/26 - 09/09	Qatar	54.5%	Moderate
Building and Grounds Cleaning and Maintenance Occupations (37-0000)	Brunner et al., 2020 ⁵⁴	n=23	Maids and Housekeeping Cleaners	Cross-sectional survey	05/04 - 05/29	United States of America	0%	High
Building and Grounds Cleaning and Maintenance Occupations (37-0000)	Goenka et al., 2020 ²⁵	n=226	Maids and Housekeeping Cleaners	Cross-sectional survey	07/12 - 08/23	India	26.11%	Moderate
Building and Grounds Cleaning and Maintenance Occupations (37-0000)	Goenka et al., 2020 ²⁶	n=10	Maids and Housekeeping Cleaners	Cross-sectional survey	08/01 - 08/31	India	10%	High

Building and Grounds Cleaning and Maintenance Occupations (37-0000)	Hanrath et al., 2020 ³²	n=515	Maids and Housekeeping Cleaners	Cross-sectional survey	05/29 - 07/06	The United Kingdom	13.2%	High
Building and Grounds Cleaning and Maintenance Occupations (37-0000)	Khan et al., 2020 ¹²⁷	n=276	Maids and Housekeeping Cleaners	Cross-sectional survey	06/15 - 06/29	India	3.3% (1.7-6.2%)	Moderate
Building and Grounds Cleaning and Maintenance Occupations (37-0000)	Leidner et al., 2020 ²²	n=137	Maids and Housekeeping Cleaners	Cross sectional study with prospective cohort follow up of a subset of the sample	04/08 - 05/22	United States of America	8.03%	High
Building and Grounds Cleaning and Maintenance Occupations (37-0000)	Moscola et al., 2020 ⁸⁹	n=7314	Maids and Housekeeping Cleaners	Cross-sectional survey	04/20 - 06/23	United States of America	20.9%	High
Building and Grounds Cleaning and Maintenance Occupations (37-0000)	Shakiba et al., 2020 ¹⁰	n=159	Maids and Housekeeping Cleaners	Cross-sectional survey	04/11 - 04/19	Iran (Islamic Republic of)	25% (13.6-37.5%)	Moderate
Building and Grounds Cleaning and Maintenance Occupations (37-0000)	Shields et al., 2020 ⁹⁷	n=29	Maids and Housekeeping Cleaners	Cross-sectional survey	04/24 - 04/25	The United Kingdom	34.5%	High
Building and Grounds Cleaning and Maintenance Occupations (37-0000)	Siddiqui et al., 2020 ²	n=46	Maids and Housekeeping Cleaners	Prospective cohort	04/15 - 08/15	India	21.7%	High

1 2 3 4 5 6 7	Personal Care and Service Occupations (39-0000)	Biggs et al., 2020 ³	n=10	Hairdressers, Hairstylists, and Cosmetologists	Cross-sectional survey	04/28 - 05/03	United States of America	10%	Moderate
8 9 10 11	Personal Care and Service Occupations (39-0000)	Biggs et al., 2020 ³	n=48	Childcare Workers	Cross-sectional survey	04/28 - 05/03	United States of America	0%	Moderate
12 13 14 15	Personal Care and Service Occupations (39-0000)	Chen et al., 2020 ¹³⁵	n=11	Personal Care Aides	Cross-sectional survey	02/19 - 02/19	China	9.09%	High
16 17 18 19	Personal Care and Service Occupations (39-0000)	Galan et al., 2020 ²⁰	n=337	Personal Care Aides	Cross-sectional survey	04/14 - 04/27	Spain	27.89%	High
20 21 22 23	Personal Care and Service Occupations (39-0000)	Galan et al., 2020 ²⁰	n=168	Personal Care Aides	Cross-sectional survey	04/14 - 04/27	Spain	27.38%	High
24 25 26 27	Personal Care and Service Occupations (39-0000)	Godbout et al., 2020 ¹³⁸	n=86	Personal Care Aides	Cross-sectional survey	07/27 - 10/02	United States of America	2.32%	High
28 29 30 31 32	Personal Care and Service Occupations (39-0000)	Hassan et al., 2020 ¹⁸⁵	n=403	Personal Care Aides	Cross-sectional survey	05/11 - 06/17	Sweden	20.1%	High
33 34 35 36	Personal Care and Service Occupations (39-0000)	Kumar et al., 2020 ¹⁴²	n=292	Personal Care Aides	Cross-sectional survey	06/01 - 06/30	India	18.5% (14.5-23.3%)	High
37 38 39 40 41 42 43 44 45 46 47	Personal Care and Service Occupations (39-0000)	Ladhani et al., 2020 ¹⁸⁶	n=208	Personal Care Aides	Prospective cohort	04/10 - 04/13	The United Kingdom	75% (68.7-80.4%)	High

Personal Care and Service Occupations (39-0000)	Lindahl et al., 2020 ¹⁸⁷	n=1005	Personal Care Aides	Cross-sectional survey	04/01 - 04/20	Sweden	22.9% (20.4-25.7%)	High
Personal Care and Service Occupations (39-0000)	Regan et al., 2020 ¹⁸⁸	n=305	Personal Care Aides	Cross-sectional survey	04/15 - 05/06	United States of America	23.6%	Unclear
Personal Care and Service Occupations (39-0000)	Siddiqui et al., 2020 ²	n=5	Personal Care Aides	Prospective cohort	04/15 - 08/15	India	40%	High
Personal Care and Service Occupations (39-0000)	Venugopal et al., 2020 ¹⁵⁰	n=72	Personal Care Aides	Cross-sectional survey	03/01 - 05/01	United States of America	28%	Moderate
Personal Care and Service Occupations (39-0000)	Viegas et al., 2020 ¹¹⁰	n=85	Personal Care Aides	Cross-sectional survey	08/03 - 08/21	Mozambique	1.18%	High
Sales and Related Occupations (41-0000)	Arnaldo et al., 2020 ¹³	n=928	Sales and Related Occupations	Cross-sectional survey	07/06 - 07/13	Mozambique	6.5%	High
Sales and Related Occupations (41-0000)	Arnaldo et al., 2020 ⁴⁸	n=1123	Sales and Related Occupations	Cross-sectional survey	08/10 - 08/21	Mozambique	1.6%	High
Sales and Related Occupations (41-0000)	Langa et al., 2020 ¹⁸¹	n=871	Sales and Related Occupations	Cross-sectional survey	09/28 - 10/09	Mozambique	0.2%	High
Sales and Related Occupations (41-0000)	Mabunda et al., 2020 ¹⁵	n=1585	Sales and Related Occupations	Cross-sectional survey	09/21 - 10/02	Mozambique	8.3%	High
Sales and Related Occupations (41-0000)	Macicame et al., 2020 ¹⁸²	n=1288	Sales and Related Occupations	Cross-sectional survey	09/14 - 09/30	Mozambique	4.97%	High

Sales and Related Occupations (41-0000)	Mahomed et al., 2020 ⁸¹	n=1556	Sales and Related Occupations	Cross-sectional survey	08/31 - 10/12	Mozambique	0.8%	High
Sales and Related Occupations (41-0000)	Mahumane et al., 2020 ⁸²	n=643	Sales and Related Occupations	Cross-sectional survey	11/02 - 11/17	Mozambique	1.9%	High
Sales and Related Occupations (41-0000)	Arnaldo et al., 2020 ¹⁴	n=472	Sales and Related Occupations	Cross-sectional survey	11/16 - 11/21	Mozambique	6.8%	High
Sales and Related Occupations (41-0000)	Arnaldo et al., 2020 ¹⁴	n=460	Sales and Related Occupations	Cross-sectional survey	11/02 - 11/12	Mozambique	5.9%	High
Sales and Related Occupations (41-0000)	Mahomed et al., 2020 ¹⁶	n=517	Sales and Related Occupations	Cross-sectional survey	11/26 - 12/03	Mozambique	8.9%	High
Sales and Related Occupations (41-0000)	Mahomed et al., 2020 ¹⁶	n=1001	Sales and Related Occupations	Cross-sectional survey	11/07 - 11/21	Mozambique	4.5%	High
Sales and Related Occupations (41-0000)	Biggs et al., 2020 ³	n=19	Retail Sales Workers	Cross-sectional survey	04/28 - 05/03	United States of America	0%	Moderate
Sales and Related Occupations (41-0000)	Poustchi et al., 2020 ²⁸	n=753	Cashiers	Cross-sectional survey	04/17 - 06/02	Iran (Islamic Republic of)	16.1% (12.9-19.2%)	Moderate
Sales and Related Occupations (41-0000)	Alali et al., 2020 ¹⁸⁹	n=525	Cashiers	Cross-sectional survey	05/23 - 06/26	Kuwait	38.1% (34-42.3%)	High
Sales and Related Occupations (41-0000)	Denyer et al., 2020 ⁶⁰	n=19075	Retail Salespersons	Cross-sectional survey	05/12 - 05/18	Japan	0.04%	Unclear
Sales and Related Occupations (41-0000)	Kern et al., 2020 ⁷³	n=300	Retail Salespersons	Cross-sectional survey	04/09 - 04/16	Germany	0.33% (0.01-1.84%)	High

Office and Administrative Support Occupations (43-0000)	Rosser et al., 2020 ³³	n=972	Office and Administrative Support Occupations	Cross-sectional survey	04/20 - 05/20	United States of America	1.34%	High
Office and Administrative Support Occupations (43-0000)	Tsitsilonis et al., 2020 ¹²	n=504	Office and Administrative Support Occupations	Cross-sectional survey	06/15 - 07/15	Greece	0.48% (0-2.37%)	Moderate
Office and Administrative Support Occupations (43-0000)	Khan et al., 2020 ⁴⁵	n=37	Hotel, Motel, and Resort Desk Clerks	Cross-sectional survey	07/01 - 07/15	India	10.8% (4.1-25.5%)	Moderate
Office and Administrative Support Occupations (43-0000)	Brunner et al., 2020 ⁵⁴	n=26	Receptionists and Information Clerks	Cross-sectional survey	05/04 - 05/29	United States of America	0%	High
Office and Administrative Support Occupations (43-0000)	Favara et al., 2020 ¹³⁶	n=10	Receptionists and Information Clerks	Prospective cohort	06/01 - 06/07	The United Kingdom	0%	High
Office and Administrative Support Occupations (43-0000)	Moscola et al., 2020 ⁸⁹	n=9645	Receptionists and Information Clerks	Cross-sectional survey	04/20 - 06/23	United States of America	12.6%	High
Office and Administrative Support Occupations (43-0000)	Biggs et al., 2020 ³	n=11	Shipping, Receiving, and Traffic Clerks	Cross-sectional survey	04/28 - 05/03	United States of America	18.18%	Moderate
Office and Administrative	Silva et al., 2020 ³⁴	n=82	Stock Clerks and Order Fillers	Cross-sectional survey	06/05 - 07/31	Brazil	4.88%	High

Support Occupations (43-0000)								
Office and Administrative Support Occupations (43-0000)	Khan et al., 2020 ⁴⁵	n=186	Secretaries and Administrative Assistants	Cross-sectional survey	07/01 - 07/15	India	3.8% (1.8-7.7%)	Moderate
Office and Administrative Support Occupations (43-0000)	Alemu et al., 2020 ⁶	n=48	Executive Secretaries and Executive Administrative Assistants	Cross-sectional survey	04/23 - 04/28	Ethiopia	2.1%	Moderate
Office and Administrative Support Occupations (43-0000)	Barallat et al., 2020 ⁵⁰	n=1181	Executive Secretaries and Executive Administrative Assistants	Cross-sectional survey	05/04 - 05/22	Spain	6.52%	High
Office and Administrative Support Occupations (43-0000)	Lumley et al., 2020 ⁹	n=1557	Executive Secretaries and Executive Administrative Assistants	Prospective cohort	04/23 - 11/30	The United Kingdom	6.74%	Moderate
Office and Administrative Support Occupations (43-0000)	Reuben et al., 2020 ¹⁶⁸	n=18	Executive Secretaries and Executive Administrative Assistants	Cross-sectional survey	05/28 - 07/15	United States of America	0%	High
Office and Administrative Support Occupations (43-0000)	Akinbami et al., 2020 ⁴⁶	n=964	Medical Secretaries	Cross-sectional survey	05/18 - 06/13	United States of America	8% (6.4-9.9%)	Moderate
Office and Administrative Support	Alharbi et al., 2020 ¹²⁵	n=8	Medical Secretaries	Cross-sectional survey	04/18 - 06/17	Saudi Arabia	25%	High

Occupations (43-0000)								
Office and Administrative Support Occupations (43-0000)	Dimcheff et al., 2020 ¹⁵⁷	n=357	Medical Secretaries	Cross-sectional survey	06/08 - 07/08	United States of America	4.2%	Moderate
Office and Administrative Support Occupations (43-0000)	Erber et al., 2020 ³¹	n=557	Medical Secretaries	Cross-sectional survey	04/14 - 05/29	Germany	3.78%	High
Office and Administrative Support Occupations (43-0000)	Finkenzeller et al., 2020 ¹⁵⁸	n=240	Medical Secretaries	Prospective cohort	06/29 - 07/29	Germany	7.1%	Moderate
Office and Administrative Support Occupations (43-0000)	Goenka et al., 2020 ²⁵	n=75	Medical Secretaries	Cross-sectional survey	07/12 - 08/23	India	8%	Moderate
Office and Administrative Support Occupations (43-0000)	Goenka et al., 2020 ²⁵	n=75	Medical Secretaries	Cross-sectional survey	07/12 - 08/23	India	8%	Moderate
Office and Administrative Support Occupations (43-0000)	Iversen et al., 2020 ⁸	n=2631	Medical Secretaries	Cross-sectional survey	04/15 - 04/22	Denmark	2.7%	Low
Office and Administrative Support Occupations (43-0000)	Leidner et al., 2020 ²²	n=793	Medical Secretaries	Cross sectional study with prospective cohort follow up of a	04/08 - 05/22	United States of America	3.15%	High

				subset of the sample				
Office and Administrative Support Occupations (43-0000)	Mesnil et al., 2020 ¹⁴³	n=184	Medical Secretaries	Cross-sectional survey	06/08 - 06/22	France	14.13%	High
Office and Administrative Support Occupations (43-0000)	Nishida et al., 2020 ⁹⁰	n=98	Medical Secretaries	Cross-sectional survey	06/12 - 06/19	Japan	1% (0.18-5.6%)	Moderate
Office and Administrative Support Occupations (43-0000)	Noor et al., 2020 ¹³⁰	n=91	Medical Secretaries	Cross-sectional survey	07/13 - 07/15	Pakistan	43.96%	Moderate
Office and Administrative Support Occupations (43-0000)	Thani et al., 2020 ¹⁸³	n=82	Medical Secretaries	Cross-sectional survey	07/26 - 09/09	Qatar	31.6%	Moderate
Office and Administrative Support Occupations (43-0000)	Zhou et al., 2020 ¹⁶⁶	n=505	Medical Secretaries	Cross-sectional survey	03/16 - 03/25	China	1.39%	Moderate
Office and Administrative Support Occupations (43-0000)	Chau et al., 2020 ¹²⁶	n=20	Data Entry Keyers	Cross-sectional survey	08/23 - 08/30	Viet Nam	0%	High
Office and Administrative Support Occupations (43-0000)	Jones et al., 2020 ²⁹	n=1233	Office Clerks, General	Cross-sectional survey	01/15 - 06/15	The United Kingdom	6.1%	High

Office and Administrative Support Occupations (43-0000)	Rosser et al., 2020 ³³	n=218	Office Clerks, General	Cross-sectional survey	04/20 - 05/20	United States of America	0%	High
Office and Administrative Support Occupations (43-0000)	Satpati et al., 2020 ²⁷	n=47	Office Clerks, General	Cross-sectional survey	07/26 - 08/08	India	4.26%	Moderate
Office and Administrative Support Occupations (43-0000)	Baracco et al., 2020 ²⁴	n=194	Office and Administrative Support Workers, All Other	Cross-sectional survey	04/23 - 05/05	Italy	14.4%	High
Office and Administrative Support Occupations (43-0000)	Brzostek et al., 2020 ¹⁵¹	n=286	Office and Administrative Support Workers, All Other	Cross-sectional survey	04/17 - 05/07	United States of America	45.5%	Moderate
Office and Administrative Support Occupations (43-0000)	Kassem et al., 2020 ⁷²	n=7	Office and Administrative Support Workers, All Other	Cross-sectional survey	06/01 - 06/14	Egypt	14.28%	High
Office and Administrative Support Occupations (43-0000)	Kassem et al., 2020 ⁷²	n=7	Office and Administrative Support Workers, All Other	Cross-sectional survey	06/01 - 06/14	Egypt	0%	High
Office and Administrative Support Occupations (43-0000)	Kassem et al., 2020 ⁷²	n=7	Office and Administrative Support Workers, All Other	Cross-sectional survey	06/01 - 06/14	Egypt	0%	High

Office and Administrative Support Occupations (43-0000)	Kassem et al., 2020 ⁷²	n=7	Office and Administrative Support Workers, All Other	Cross-sectional survey	06/01 - 06/14	Egypt	14.28%	High
Farming, Fishing, and Forestry Occupations (45-0000)	Satpati et al., 2020 ²⁷	n=53	Agricultural Workers	Cross-sectional survey	07/26 - 08/08	India	0%	Moderate
Farming, Fishing, and Forestry Occupations (45-0000)	Addetia et al., 2020 ¹⁹⁰	n=120	Fishers and Related Fishing Workers	Retrospective cohort	05/01 - 05/31	United States of America	5%	High
Farming, Fishing, and Forestry Occupations (45-0000)	Arnaldo et al., 2020 ¹³	n=80	Fishers and Related Fishing Workers	Cross-sectional survey	07/06 - 07/13	Mozambique	5%	High
Construction and Extraction Occupations (47-0000)	Biggs et al., 2020 ³	n=42	Construction Trades Workers	Cross-sectional survey	04/28 - 05/03	United States of America	0%	Moderate
Installation, Maintenance, and Repair Occupations (49-0000)	Blairon et al., 2020 ⁵²	n=134	Other Installation, Maintenance, and Repair Occupations	Cross-sectional survey	05/25 - 06/19	Belgium	16.4%	High
Production Occupations (51-0000)	Picon et al., 2020 ¹⁹¹	n=40	Butchers and Other Meat, Poultry, and Fish Processing Workers	Cross-sectional survey	06/13 - 06/17	Brazil	15%	Moderate
Production Occupations (51-0000)	Picon et al., 2020 ¹⁹¹	n=1087	Miscellaneous Food Processing Workers	Cross-sectional survey	06/13 - 06/17	Brazil	1.47%	Moderate
Production Occupations (51-0000)	Bontadi et al., 2020 ¹⁹²	n=1267	Production Workers, All Other	Cross-sectional survey	04/11 - 04/29	Italy	1.58%	High

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47	Production Occupations (51-0000)	Xu et al., 2020 ¹⁹³	n=442	Production Workers, All Other	Cross-sectional survey	03/09 - 04/10	China	1.4% (0.6-2.9%)	High
	Transportation and Material Moving Occupations (53-0000)	Arnaldo et al., 2020 ¹³	n=248	Transportation and Material Moving Occupations	Cross-sectional survey	07/06 - 07/13	Mozambique	4.8%	High
	Transportation and Material Moving Occupations (53-0000)	Arnaldo et al., 2020 ⁴⁸	n=367	Transportation and Material Moving Occupations	Cross-sectional survey	08/10 - 08/21	Mozambique	7.4%	High
	Transportation and Material Moving Occupations (53-0000)	Arnaldo et al., 2020 ¹⁴	n=112	Transportation and Material Moving Occupations	Cross-sectional survey	11/16 - 11/21	Mozambique	16.1%	High
	Transportation and Material Moving Occupations (53-0000)	Biggs et al., 2020 ³	n=14	Transportation and Material Moving Occupations	Cross-sectional survey	04/28 - 05/03	United States of America	0%	Moderate
	Transportation and Material Moving Occupations (53-0000)	Gudo et al., 2020 ⁶⁵	n=554	Transportation and Material Moving Occupations	Cross-sectional survey	06/17 - 06/30	Mozambique	3% (1-4%)	High
	Transportation and Material Moving Occupations (53-0000)	Langa et al., 2020 ¹⁸¹	n=230	Transportation and Material Moving Occupations	Cross-sectional survey	09/28 - 10/09	Mozambique	0.4%	High
	Transportation and Material Moving Occupations (53-0000)	Mabunda et al., 2020 ¹⁵	n=473	Transportation and Material Moving Occupations	Cross-sectional survey	09/21 - 10/02	Mozambique	8.7%	High
	Transportation and Material Moving Occupations (53-0000)	Macicame et al., 2020 ¹⁸²	n=282	Transportation and Material Moving Occupations	Cross-sectional survey	09/14 - 09/30	Mozambique	3.19%	High

Transportation and Material Moving Occupations (53-0000)	Mahomed et al., 2020 ⁸¹	n=334	Transportation and Material Moving Occupations	Cross-sectional survey	08/31 - 10/12	Mozambique	1.5%	High
Transportation and Material Moving Occupations (53-0000)	Mahumane et al., 2020 ⁸²	n=287	Transportation and Material Moving Occupations	Cross-sectional survey	11/02 - 11/17	Mozambique	1%	High
Transportation and Material Moving Occupations (53-0000)	Thani et al., 2020 ¹⁸³	n=435	Transportation and Material Moving Occupations	Cross-sectional survey	07/26 - 09/09	Qatar	53.4%	Moderate
Transportation and Material Moving Occupations (53-0000)	Halatoko et al., 2020 ⁴¹	n=212	Air Transportation Workers	Cross-sectional survey	04/23 - 05/08	Togo	0.9%	High
Transportation and Material Moving Occupations (53-0000)	Viegas et al., 2020 ¹¹⁰	n=623	Air Transportation Workers	Cross-sectional survey	08/03 - 08/21	Mozambique	2.25%	High
Transportation and Material Moving Occupations (53-0000)	Viegas et al., 2020 ¹¹⁰	n=362	Air Transportation Workers	Cross-sectional survey	08/03 - 08/21	Mozambique	3.31%	High
Transportation and Material Moving Occupations (53-0000)	Khan et al., 2020 ¹²⁷	n=57	Ambulance Drivers and Attendants, Except Emergency Medical Technicians	Cross-sectional survey	06/15 - 06/29	India	3.5% (0.9-13.3%)	Moderate
Transportation and Material Moving Occupations (53-0000)	Martinez et al., 2020 ¹²¹	n=30	Heavy and Tractor-Trailer Truck Drivers	Cross-sectional survey	04/16 - 04/17	United States of America	16.67%	High
Transportation and Material Moving Occupations (53-0000)	Siddiqui et al., 2020 ²	n=9	Heavy and Tractor-Trailer Truck Drivers	Prospective cohort	04/15 - 08/15	India	11.1%	High

1 2 3 4 5 6 7	Transportation and Material Moving Occupations (53-0000)	Halatoko et al., 2020 ⁴¹	n=122	Taxi Drivers and Chauffeurs	Cross-sectional survey	04/23 - 05/08	Togo	0.8%	High
8 9 10 11	Transportation and Material Moving Occupations (53-0000)	Poustchi et al., 2020 ²⁸	n=718	Taxi Drivers and Chauffeurs	Cross-sectional survey	04/17 - 06/02	Iran (Islamic Republic of)	14.1% (11.4-16.9%)	Moderate
12 13 14 15	Transportation and Material Moving Occupations (53-0000)	Alemu et al., 2020 ⁶	n=8	Parking Lot Attendants	Cross-sectional survey	04/23 - 04/28	Ethiopia	12.5%	Moderate
16 17 18 19	Transportation and Material Moving Occupations (53-0000)	Alemu et al., 2020 ⁶	n=110	Laborers and Freight, Stock, and Material Movers, Hand	Cross-sectional survey	04/23 - 04/28	Ethiopia	10%	Moderate
20 21 22 23	Transportation and Material Moving Occupations (53-0000)	Khan et al., 2020 ⁴⁵	n=97	Laborers and Freight, Stock, and Material Movers, Hand	Cross-sectional survey	07/01 - 07/15	India	2.1% (0.5-7.9%)	Moderate
24 25 26 27 28	Transportation and Material Moving Occupations (53-0000)	Satpati et al., 2020 ²⁷	n=63	Laborers and Freight, Stock, and Material Movers, Hand	Cross-sectional survey	07/26 - 08/08	India	12.7%	Moderate
29 30 31 32	Not employed (mixed)*	Carrat et al., 2020 ⁴	n=6295	Unemployed	Prospective cohort	05/04 - 06/23	France	4.9% (4.1-5.6%)	Moderate
33 34 35 36 37	Not employed (mixed)*	Carrat et al., 2020 ⁴	n=1457	Unemployed	Prospective cohort	05/04 - 06/23	France	8.3% (6.4-10%)	Moderate
38 39 40 41 42 43 44	Not employed (mixed)*	Carrat et al., 2020 ⁴	n=306	Unemployed	Prospective cohort	05/04 - 06/23	France	7.2% (2.3-11.1%)	Moderate
45 46 47	Not employed (mixed)*	Carrat et al., 2020 ⁴	n=125	Unemployed	Prospective cohort	05/04 - 06/23	France	3.8% (0.5-6.3%)	Moderate
	Not employed (mixed)*	Carrat et al., 2020 ⁴	n=402	Unemployed	Prospective cohort	05/04 - 06/23	France	7.8% (4.7-10.4%)	Moderate

Not employed (mixed)*	Chamie et al., 2020 ¹⁹⁴	n=230	Unemployed	Cross-sectional survey	04/25 - 04/28	United States of America	4.3%	Moderate
Not employed (mixed)*	McLaughlin et al., 2020 ¹⁹⁵	n=241	Unemployed	Cross-sectional survey	05/04 - 05/19	United States of America	19.3% (14.6-24.5%)	Moderate
Not employed (mixed)*	Merkely et al., 2020 ¹	n=1095	Unemployed	Cross-sectional survey	05/01 - 05/16	Hungary	0.43% (0.16-0.84%)	Moderate
Not employed (mixed)*	Munoz et al., 2020 ¹⁹⁶	n=905	Unemployed	Cross-sectional survey	07/15 - 07/16	Argentina	20%	Moderate
Not employed (mixed)*	Richard et al., 2020 ⁵	n=549	Unemployed	Cross-sectional survey	04/06 - 06/30	Switzerland	6%	Low
Not employed (mixed)*	Satpati et al., 2020 ²⁷	n=47	Unemployed	Cross-sectional survey	07/26 - 08/08	India	2.13%	Moderate
Not employed (mixed)*	Ward et al., 2020 ¹¹³	n=59369	Unemployed	Cross-sectional survey	09/15 - 09/28	The United Kingdom	3.35%	Moderate

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Occupation and SARS-CoV-2 seroprevalence studies: a systematic review

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ABSTRACT

Objective. To describe and synthesize studies of SARS-CoV-2 seroprevalence by occupation prior to the widespread vaccine rollout.

Methods. We identified studies of occupational seroprevalence from a living systematic review (PROSPERO CRD42020183634). Electronic databases, gray literature, and news media were searched for studies published January-December 2020. Seroprevalence estimates and a free text description of the occupation were extracted and classified according to the Standard Occupational Classification (SOC) 2010 system using a machine-learning algorithm. Due to heterogeneity, results were synthesized narratively.

Results. We identified 196 studies including 591,940 participants from 38 countries. Most studies (n=162; 83%) were conducted locally vs regionally or nationally. Sample sizes were generally small (median=220 participants per occupation) and 135 studies (69%) were at a high risk of bias. One or more estimates were available for 21/23 major SOC occupation groups, but over half of the estimates identified (n=359/600) were for healthcare-related occupations. 'Personal Care and Service Occupations' (median 22% [IQR 9-28%]; n=14) had the highest median seroprevalence.

Conclusions. Many seroprevalence studies covering a broad range of occupations were published in the first year of the pandemic. Results suggest considerable differences in seroprevalence between occupations, although few large, high-quality studies were done. Well-designed studies are required to improve our understanding of the occupational risk of SARS-CoV-2 and should be considered as an element of pandemic preparedness for future respiratory pathogens.

Strengths and limitations

- We conducted a comprehensive search of the COVID-19 seroprevalence literature, including non-English articles, government reports, unpublished data.
- Occupations were classified using the Standard Occupational Classification (SOC) 2010 coding system to improve interpretability and facilitate comparison with other datasets.
- Seroprevalence may underestimate the true prevalence of infection because antibody titres decline over time, but where possible we prioritized prevalence estimates for IgG antibodies, which appear to be more robust than other immunoglobulin types.
- We did not adjust for differences in serologic test performance.

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INTRODUCTION

Occupation is a social determinant of health and an important risk factor for SARS-CoV-2 infection. Essential workers in health and social care occupations have an increased risk of COVID-19 compared to non-essential workers, but the risks for other occupations are not well defined.¹⁻³ Studies examining confirmed COVID-19 cases to examine occupational COVID-19 risk are affected by variable testing rates. For example, testing rates may be higher in workplaces offering testing or paid sick leave, and are impacted by geographic (e.g., urban versus rural) and socio-economic factors (e.g., deprivation), potentially biasing results.⁴⁻⁶ Few high-quality, prospective studies using frequent, serial molecular or antigen testing covering a broad range of occupations having been conducted, in part due to the costs and administrative burden of such studies.^{7,8}

Serologic testing for SARS-CoV-2 antibodies provides evidence of previous infection and/or vaccination depending on vaccination status and the specific antigens targeted and can be used to obtain more accurate estimates of the cumulative incidence of infection.⁹ Accurate data on the occupational risks of COVID-19 and other respiratory infections are essential for informing the development of occupational safety guidelines and regulations, transmission control measures and resource allocation (testing, personal protective equipment (PPE), etc.). The objectives of this review were to describe and synthesize studies of SARS-CoV-2 seroprevalence across a broad range of occupations globally prior to the widespread rollout of vaccines.

METHODS

We identified seroprevalence studies with sample frames or subgrouping variables related to occupation or employment status from a database compiled via a living systematic review (PROSPERO CRD42020183634). The database has been described previously and includes >1000 cohort and cross-sectional studies reporting antibody testing for SARS-CoV-2 in humans identified from electronic databases, grey literature, and news media.¹⁰⁻¹² We restricted the current review to studies published January-December 2020 before vaccines were rolled-out, because differential vaccination rates by occupation may obscure results. We excluded studies that only reported seroprevalence for mixed occupation groups or workplaces (e.g., “hospital staff”) rather than specific occupations, included children <18 years and that could not be machine-translated using Google Translate if unavailable in English or French (**Supplementary File 1**).

We extracted study information, sample characteristics, seroprevalence estimates and study-level risk of bias from the living review database. Risk of bias was assessed with a modified Joanna Briggs Institute Checklist for Prevalence Studies by one reviewer and verified independently as described previously. Overall risk of bias was assessed qualitatively based on whether seroprevalence estimates were very likely (corresponding to a low risk of bias), likely (moderate risk) or unlikely (low risk) to be correct for the author’s stated target population (**Supplementary File 1**).^{12,13} If multiple estimates were reported, the most recent estimate using laboratory-based methods (e.g. ELISA), and anti-spike and/or IgG antibodies were prioritized, because non-IgG and anti-nucleocapsid antibodies may decline more rapidly.¹⁴ Free-text

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3 descriptions of occupations were extracted from the original studies by one researcher and
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5 reviewed by a second.
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10 For each seroprevalence estimate, we identified the relevant Standard Occupational
11 Classification (SOC) 2010 codes by applying the National Institute for Occupational Safety &
12 Health (NIOSH) Industry and Occupation Computerized Coding System (NIOCCS) to
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14 occupation descriptions.¹⁵ NIOCCS was chosen, because many studies were conducted in the
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16 USA. Coding was manually verified if there was insufficient information for NIOCCS
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18 classification, or if the probability of correct classification to the six-digit level was <0.8 based
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20 on our review of a subset of the NIOCCS coded data (**Supplementary File 1**). Anticipating
21
22 substantial heterogeneity and an insufficient number of estimates relative to covariates for meta-
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24 regression, we planned to summarize data using the median/IQR.
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32 **Patient and Public Involvement:** It was not possible or appropriate to involve patients or the
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34 public in this study.
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38 RESULTS

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41 We identified 196 studies of occupational seroprevalence conducted in 2020 during the first and
42
43 second waves of the pandemic (**Figure 1**). There were 591,940 participants from 38 countries,
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45 including the USA (n=44 studies), UK (n=16) and Italy (n=15). Most studies (n=162; 83%) were
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47 conducted locally (e.g. city, county) as opposed to regionally (e.g. state; n=20; 10%) or
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49 nationally (n=14; 7%). Most were restricted to one occupational group (n=103), limiting direct
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51 comparisons (i.e. using the same reference group). Sample sizes were often small (median=220,
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53 IQR 64-568 participants). Overall, 135 studies (69%) were at a high risk of bias, 47 moderate
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3 (24%), 2 low (1%) and 12 unclear (6%). Common reasons for bias were inadequate statistical
4 analysis (i.e. no adjustment for test or sample characteristics; 92%), non-probability sampling
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6 (74%), and small sample-size (46%).
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12 At least one estimate was available for all 23 major SOC occupation groups, except for ‘Legal’
13 and ‘Military-Specific’ occupations (**Figure 2**; all studies). Over half of the 600 estimates
14 identified (n=359) were for healthcare-related occupations. For SOC groups with three or more
15 estimates, the highest median seroprevalence was reported for ‘Personal Care and Service
16 Occupations’ (median 22% [IQR 9-28%]; n=14, e.g. ‘Personal Care Aids’). The next highest was
17 reported for ‘Building and Grounds Cleaning and Maintenance’ occupations (11% [3-22%];
18 n=17, e.g. ‘Maids and Housekeeping Cleaners’), and ‘Healthcare Support’ (11% [2-20%]; n=39,
19 e.g. ‘Nursing Assistants’) occupations. The lowest median seroprevalence was 1% (0-11%; n=6,
20 e.g. ‘Athletes’) for ‘Arts, Design, Entertainment, Sports, and Media Occupations.’ Individual
21 estimates are listed in **Supplementary File 2**.
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38 DISCUSSION

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40 This review is the first comprehensive synthesis of occupational COVID-19 seroprevalence
41 studies world-wide. We identified 196 studies representing 21 out of 23 major SOC groups
42 conducted during the first and second waves of the SARS-CoV-2 pandemic in 2020, prior to the
43 widespread rollout of vaccines, and described occupational groups with high seroprevalence.
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51 Seroprevalence studies may estimate the cumulative incidence of infection more accurately than
52 diagnostic testing studies when access to testing and test performance are poor, and also can
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3 identify asymptomatic infections.^{6,8} The data identified suggest considerable differences in
4 seroprevalence by occupation, though we did not statistically test for differences due to
5
6 considerable variation in geography, study dates and workplace determinants of infection (e.g.
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8 PPE, ventilation). ‘Caring and Personal Service’ occupations had the highest median
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10 seroprevalence (22%), which was four-times higher than the unemployed (5%) and median
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12 seroprevalence across all occupational groups (5%). The UK Office for National Statistics
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14 reported a slightly lower cumulative incidence for positive diagnostic or rapid tests for COVID-
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16 19 across 25 occupational groups of 4% (mean),⁴ but the discrepancy between the true
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18 cumulative incidence and confirmed infections is likely greater in regions with less access to
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20 testing: national, population-based serosurveys have estimated there are 10-20 serologically
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22 identifiable cases per one confirmed case.¹²
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31 In future pandemics, large, well-reported, high-quality seroprevalence studies across a broad
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33 range of occupations are needed at an early stage to inform appropriate workplace policy. It has
34
35 been suggested that 20% of the US workforce was exposed to disease or infection at work at
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37 least once a month prior to the pandemic.¹⁶ Accurate data on the occupational risks of respiratory
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39 infections, including SARS-CoV-2 are needed to inform understanding of transmission,
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41 occupational health and safety agency guidelines and allocation of resources (e.g., personal
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43 protective equipment and vaccines) during outbreaks and pandemics. For governments, there are
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45 also issues of occupational disease recognition and compensation to be considered.
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51 As such, future population-based studies on respiratory infections should collect data on
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53 occupation. In the case of epidemic infection, collaboration between academic centres with the
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3 capacity to conduct large-scale studies and government agencies with expertise in disease
4 surveillance and access to workplace data (e.g., public health, occupational health and safety)
5 may be beneficial.¹² Other authors have suggested the utility of occupational surveillance
6 systems.¹⁷ However, the routine completion of the occupation field in electronic health records
7 would also serve this purpose as well as informing patient reported outcome measures.
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16 **Strengths and Limitations**

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18 Despite the large number of studies of occupational seroprevalence conducted, many studies had
19 methodological limitations. Only two studies were at a low risk of bias and most occupational
20 subgroups had small sample sizes (median 220 participants). Many were limited to one major
21 SOC group (n=103 studies), which precluded comparisons. Detailed descriptions of occupations
22 were often lacking, potentially contributing to coding errors and misclassification, and workplace
23 determinants of infection (e.g. use of PPE) were poorly reported.
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35 In conclusion, our review shows that a large number of seroprevalence studies covering a broad
36 range of occupations were published in the first year of the pandemic. Results suggest
37 considerable differences in seroprevalence between occupations, although few large, well-
38 reported, high-quality studies were done. Carefully-designed, adequately powered
39 seroprevalence studies with coverage of a broad range of occupations could improve our
40 understanding of the occupational risk of SARS-CoV-2 and other respiratory infections and
41 should be considered an element of pandemic preparedness and response.
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Funding Statement

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Statement of author's contributions

This secondary analysis of the SeroTracker database was conceived by NB, EB, DK and AA. Senior authors on this paper were NB, DK, RA and AA. The protocol was developed by EB, NB and DK. Data cleaning was performed by CC, CD, NatalieD, SD and EB and verification by EB, SD, NathanD and GB. Analysis was performed by EB and RA. The first draft of the manuscript was written by EB and revised by EB, RA, NB, NathanD, GB, SD, CC, AA, DK. The SeroTracker Consortium maintained the living systematic review database used in the study. All authors reviewed and agreed to the findings, and also provided critical revisions to the paper.

Disclosure of potential and actual conflicts of interest

RKA was previously a Technical Consultant for the Bill and Melinda Gates Foundation Strategic Investment Fund, is a minority shareholder of Alethea Medical, and was a former Senior Policy Advisor at Health Canada. Each of these relationships is unrelated to the present work.

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3 JP reports grants to his institution from MedImmune, Sanofi Pasteur, Merck and AbbVie, and
4
5 personal fees for lectures from AbbVie and Astra-Zeneca, all outside of the submitted work.
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10 MPC reports grants from McGill Interdisciplinary Initiative in Infection and Immunity, grants
11
12 from Canadian Institutes of Health Research, during the conduct of the study; personal fees from
13
14 GEn1E Lifesciences, personal fees from nplex biosciences, personal fees from Kanvas
15
16 biosciences, personal fees from AstraZeneca, non-financial support from Cidara therapeutics,
17
18 non-financial support from Scynexis, Inc., non-financial support from Amplyx Pharmaceuticals,
19
20 outside the submitted work. In addition, MPC has a patent for methods detecting tissue damage,
21
22 graft versus host disease, and infections using cell-free DNA profiling pending, a patent for
23
24 methods assessing the severity and progression of SARS-CoV-2 infections using cell-free DNA
25
26 pending, a patent for rapid identification of antimicrobial resistance and other microbial
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28 phenotypes using highly-multiplexed fluorescence in situ hybridization pending, and a patent
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30 highly multiplexed detection of gene expression with hybridization chain reaction pending, all
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32 outside the submitted work.
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39 **Ethics approval:** Not applicable. This study did not involve human participants or animals.
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41 **Dating sharing:** Seroprevalence data can be downloaded (or requested) from
42 <https://serotracker.com>.
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<https://serotracker.com/data>

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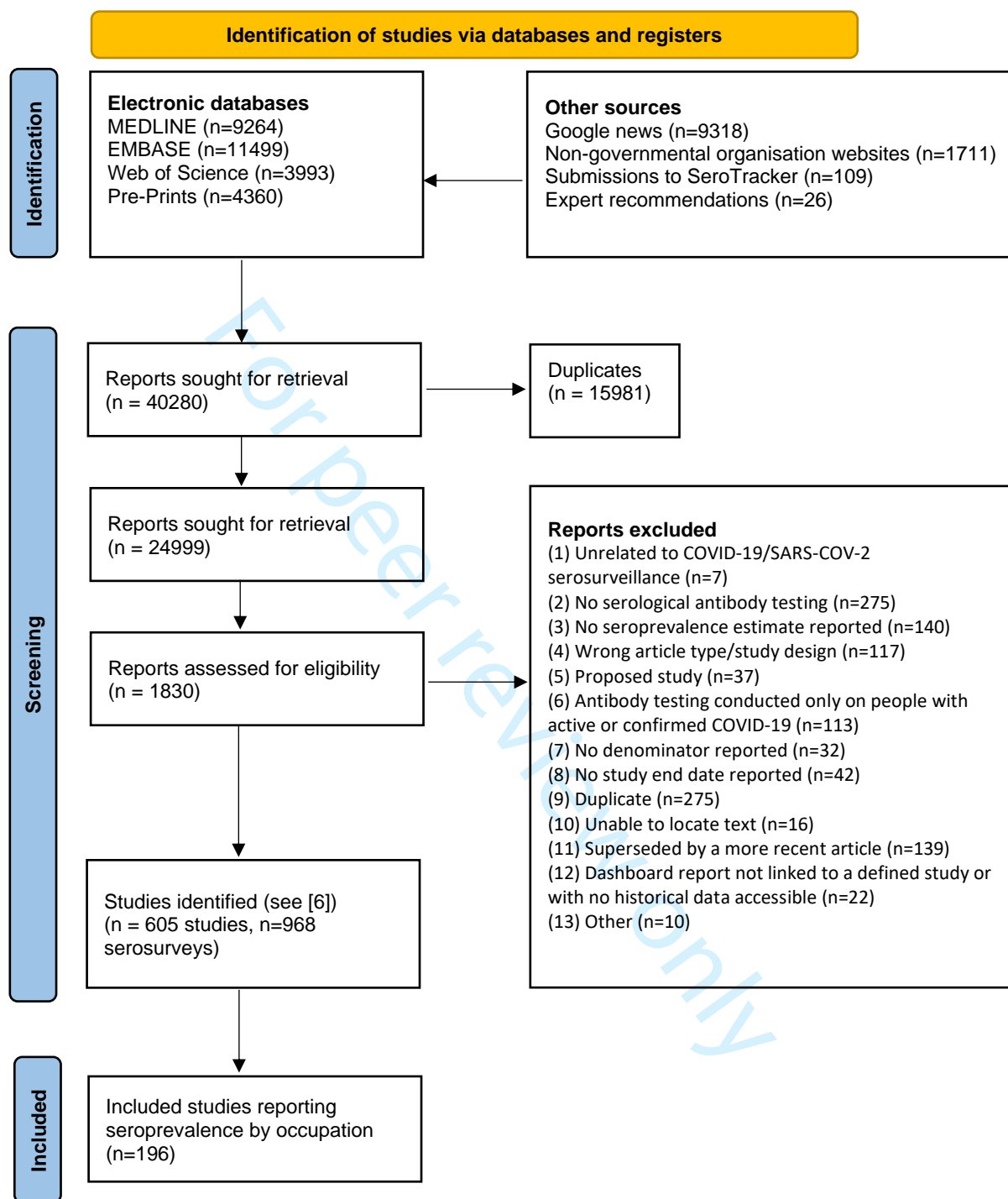
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3 **Figure Legends**
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8 **Figure 1.** PRISMA flow diagram
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12 **Figure 2.** Seroprevalence by SOC 2010 major occupation group. *Estimates are a mix of
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14 ‘Healthcare Practitioners and Technical Occupations’ and ‘Healthcare Support Occupations’ (see
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16 next page)
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21 **Supplementary File 1.** Supplementary methods
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24 **Supplementary File 2.** Summary of included studies and references
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From: Page MJ, McKenzie JE, Bossuyt PM, Boutron I, Hoffmann TC, Mulrow CD, et al. The PRISMA 2020 statement: an updated guideline for reporting systematic reviews. *BMJ* 2021;372:n71. doi: 10.1136/bmj.n71

For more information, visit: <http://www.prisma-statement.org/>

SOC 2010 Major Occupation Group	Total		BMJ Open	Median, IQR		Seroprevalence %		Page 18 of 119
	Estimates	Countries	Study dates, midpoint	Sample size	(Median, IQR)	(Scale 0-75%)	Low-Moderate RoB	
1 Architecture and Engineering Occupations (17-0000)	1	1	15/08 (15/08-15/08)	21 (21-21)	42.9 (42.9-42.9)		0 (0%)	
2 Personal Care and Service Occupations (39-0000)	14	7	03/05 (02/04-02/06)	127 (54-302)	21.5 (9.32-27.76)		3 (21%)	
3 Installation, Maintenance, and Repair Occupations (49-0000)	1	1	19/06 (19/06-19/06)	134 (134-134)	16.4 (16.4-16.4)		0 (0%)	
4 Building and Grounds Cleaning and Maintenance Occupations (37-0000)	17	8	13/07 (09/06-16/08)	102 (42-226)	10.8 (3.3-21.7)		6 (35%)	
5 Healthcare Support Occupations (31-0000)	39	12	05/06 (19/05-21/06)	263 (122-562)	10.7 (2-20.05)		12 (31%)	
6 Business and Financial Operations Occupations (13-0000)	2	2	05/07 (18/06-22/07)	462 (252-671)	8.27 (5.3-11.23)		2 (100%)	
8 Management Occupations (11-0000)	10	6	17/06 (01/05-02/08)	44 (23-145)	8.17 (6.7-19.93)		3 (30%)	
9 Food Preparation and Serving Related Occupations (35-0000)	6	4	17/06 (11/05-23/07)	58 (12-108)	6.35 (2.37-24.03)		2 (33%)	
10 Healthcare Practitioners and Technical Occupations (29-0000)	222	23	13/06 (13/05-13/07)	215 (64-482)	5.91 (1.83-11.71)		84 (38%)	
11 Healthcare Practitioners and Technical Occupations, 5-digit codes**								
12 Miscellaneous Health Technologists and Technicians	4	3	26/08 (09/08-12/09)	60 (20-121)	12.96 (9.09-27.54)		1 (25%)	
13 Registered Nurses	78	18	05/06 (05/05-05/07)	329 (71-1000)	8.44 (3.68-15.5)		22 (28%)	
14 Clinical Laboratory Technologists and Technicians	18	12	15/06 (19/05-11/07)	204 (86-284)	6.22 (2.07-11.94)		12 (67%)	
16 Physicians and Surgeons	65	21	09/06 (10/05-09/07)	214 (59-564)	5.88 (1.85-11.8)		23 (35%)	
17 Emergency Medical Technicians and Paramedics	9	6	13/06 (27/05-30/06)	157 (56-243)	5.41 (5.2-11)		4 (44%)	
18 Therapists	15	4	08/06 (19/05-28/06)	121 (61-235)	3.75 (0-9.45)		7 (47%)	
19 Physician Assistants	9	2	27/06 (26/05-28/07)	230 (156-320)	3.48 (0.64-9.43)		3 (33%)	
21 Pharmacists	9	7	29/06 (14/06-14/07)	113 (29-213)	0.5 (0-3.45)		4 (44%)	
22 Healthcare Occupations (mixed)*	94	25	05/06 (29/04-12/07)	375 (110-1012)	5.66 (2.35-11.6)		23 (24%)	
23 Sales and Related Occupations (41-0000)	23	8	21/08 (22/06-19/10)	643 (236-1184)	5.3 (1.2-8.8)		6 (26%)	
24 Education, Training, and Library Occupations (25-0000)	6	5	05/07 (12/06-27/07)	238 (73-1305)	5.07 (2.71-17.22)		3 (50%)	
25 Farming, Fishing, and Forestry Occupations (45-0000)	3	3	13/07 (25/06-30/07)	80 (66-100)	5 (2.5-5)		1 (33%)	
26 Not employed (mixed)*	37	14	23/06 (12/05-04/08)	382 (116-905)	4.9 (2.7-14.97)		28 (76%)	
28 Office and Administrative Support Occupations (43-0000)	39	18	14/06 (18/05-11/07)	120 (32-522)	4.88 (1.36-13.36)		20 (51%)	
29 First responders (mixed)*	6	1	18/05 (13/05-22/05)	219 (72-599)	4.67 (1.6-7.34)		1 (17%)	
30 Community and Social Service Occupations (21-0000)	6	2	30/05 (18/05-11/06)	104 (49-188)	4.45 (2.13-6.1)		1 (17%)	
32 Protective Service Occupations (33-0000)	28	9	04/07 (21/05-16/08)	190 (46-555)	4.29 (2.17-7.47)		6 (21%)	
33 Transportation and Material Moving Occupations (53-0000)	23	7	08/08 (08/06-08/10)	230 (80-364)	3.5 (1.8-11.8)		8 (35%)	
34 Life, Physical, and Social Science Occupations (19-0000)	11	7	06/07 (11/06-30/07)	343 (174-570)	2.6 (1.66-6.46)		4 (36%)	
35 Production Occupations (51-0000)	4	3	23/05 (26/04-19/06)	764 (342-1132)	1.52 (1.45-4.93)		2 (50%)	
36 Arts, Design, Entertainment, Sports, and Media Occupations (27-0000)	6	5	07/07 (04/06-09/08)	164 (47-823)	1.39 (0.18-11.02)		3 (50%)	
38 Computer and Mathematical Occupations (15-0000)	1	1	03/05 (03/05-03/05)	47 (47-47)	0 (0-0)		1 (100%)	
39 Construction and Extraction Occupations (47-0000)	1	1	03/05 (03/05-03/05)	42 (42-42)	0 (0-0)		1 (100%)	

Supplementary File 1 Materials

Table of Contents

Supplementary files.....	2
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S2. Search strategy	4
S3. Detailed eligibility criteria	8
S4. Tool for assessing study risk of bias.....	9
S5. Details of occupational coding.....	12
References for supplementary files	14

For peer review only

13 **Supplementary Material**14 **S1. PRISMA checklist**
15

Section/topic	#	Checklist item	Reported on page #
TITLE			
Title	1	Identify the report as a systematic review, meta-analysis, or both.	0
ABSTRACT			
Structured summary	2	Provide a structured summary including, as applicable: background; objectives; data sources; study eligibility criteria, participants, and interventions; study appraisal and synthesis methods; results; limitations; conclusions and implications of key findings; systematic review registration number.	1
INTRODUCTION			
Rationale	3	Describe the rationale for the review in the context of what is already known.	3, lines 14-30
Objectives	4	Provide an explicit statement of questions being addressed with reference to participants, interventions, comparisons, outcomes, and study design (PICOS).	3, line 30-32
METHODS			
Protocol and registration	5	Indicate if a review protocol exists, if and where it can be accessed (e.g., Web address), and, if available, provide registration information including registration number.	3, line 39
Eligibility criteria	6	Specify study characteristics (e.g., PICOS, length of follow-up) and report characteristics (e.g., years considered, language, publication status) used as criteria for eligibility, giving rationale.	4, lines 39-45
Information sources	7	Describe all information sources (e.g., databases with dates of coverage, contact with study authors to identify additional studies) in the search and date last searched.	4, lines 39-40
Search	8	Present full electronic search strategy for at least one database, including any limits used, such that it could be repeated.	Suppl. File 2
Study selection	9	State the process for selecting studies (i.e., screening, eligibility, included in systematic review, and, if applicable, included in the meta-analysis).	4, lines 41-43
Data collection process	10	Describe method of data extraction from reports (e.g., piloted forms, independently, in duplicate) and any processes for obtaining and confirming data from investigators.	4, lines 41-49, 57-58
Data items	11	List and define all variables for which data were sought (e.g., PICOS, funding sources) and any assumptions and simplifications made.	4, lines 44-45 (see reference to previous study)
Risk of bias in individual studies	12	Describe methods used for assessing risk of bias of individual studies (including specification of whether this was done at the study or outcome level), and how this information is to be used in any data synthesis.	4, see reference and Suppl. File 1
Summary measures	13	State the principal summary measures (e.g., risk ratio, difference in means).	4, lines 57-78
Synthesis of results	14	Describe the methods of handling data and combining results of studies, if done, including measures of consistency (e.g., I^2) for each meta-analysis.	4, lines 57-58
Risk of bias across studies	15	Specify any assessment of risk of bias that may affect the cumulative evidence (e.g., publication bias, selective reporting within studies).	4, lines 47-48
Additional analyses	16	Describe methods of additional analyses (e.g., sensitivity or subgroup analyses, meta-regression), if done, indicating which were pre-specified.	NA
RESULTS			
Study selection	17	Give numbers of studies screened, assessed for eligibility, and included in the review, with reasons for exclusions at each stage, ideally with a flow diagram.	Suppl File 1
Study characteristics	18	For each study, present characteristics for which data were extracted (e.g., study size, PICOS, follow-up period) and provide the citations.	Suppl. File 2
Risk of bias within studies	19	Present data on risk of bias of each study and, if available, any outcome level assessment (see item 12).	Suppl. File 2
Results of individual studies	20	For all outcomes considered (benefits or harms), present, for each study: (a) simple summary data for each intervention group (b) effect estimates and confidence intervals, ideally with a forest plot.	Suppl. File 2
Synthesis of results	21	Present results of each meta-analysis done, including confidence intervals and measures of consistency.	NA – see narrative synthesis on page 5 & Figure 1
Risk of bias across studies	22	Present results of any assessment of risk of bias across studies (see Item 15).	5, lines 72-75 Figure 1
Additional analysis	23	Give results of additional analyses, if done (e.g., sensitivity or subgroup analyses, meta-regression [see Item 16]).	NA
DISCUSSION			
Summary of evidence	24	Summarize the main findings including the strength of evidence for each main outcome; consider their relevance to key groups (e.g., healthcare providers, users, and	6, lines 110-118

		policy makers).	
Limitations	25	Discuss limitations at study and outcome level (e.g., risk of bias), and at review-level (e.g., incomplete retrieval of identified research, reporting bias).	6, lines 131-136
Conclusions	26	Provide a general interpretation of the results in the context of other evidence, and implications for future research.	6, lines 119-120
FUNDING			
Funding	27	Describe sources of funding for the systematic review and other support (e.g., supply of data); role of funders for the systematic review.	9

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S2. Search strategy

Database: Ovid MEDLINE(R) and Epub Ahead of Print, In-Process & Other Non-Indexed Citations and Daily

Dates: January 1, 2020 to December 31, 2020

Notes: Covid-19 search terms were adapted from Ovid Expert Searches

#	Search terms
1	exp Coronavirus/
2	exp Coronavirus Infections/
3	(coronavirus* or corona virus* or OC43 or NL63 or 229E or HKU1 or HCoV* or ncov* or covid* or sars-cov* or sarscov* or Sars-coronavirus* or Severe Acute Respiratory Syndrome Coronavirus*).tw,kf.[EB2]
4	or/1-3
5	4 not ((MERS or MERS-CoV or Middle East respiratory syndrome or camel* or dromedar* or equine or coronary or coronal or coidence* or covidien or influenza virus or HIV or bovine or calves or TGEV or feline or porcine or BCoV or PED or PEDV or PDCoV or FIPV or FCoV or SADS-CoV or canine or CCov or zoonotic or avian influenza or H1N1 or H5N1 or H5N6 or IBV).mp. or (animals/ not humans/))
6	((pneumonia or covid* or coronavirus* or corona virus* or ncov* or 2019-ncov or sars* or virus).tw,kf. or exp pneumonia/) and Wuhan.tw,kf.
7	(2019-ncov* or 2019nCov* or ncov19 or ncov-19 or 2019-novel CoV or sars-cov2* or sars-cov-2* or sarscov2* or sarscov-2* or Sars-coronavirus2 or Sars-coronavirus-2 or SARS-like coronavirus* or coronavirus 2 or coronavirus2* or corona or coronavirus-19 or covid19 or covid-19 or covid 2019 or ((novel or new or nouveau) adj2 (CoV or nCoV or covid or coronavirus* or corona virus or Pandemi*2)) or ((covid or covid19* or covid-19) and pandemic*2) or (coronavirus* and pneumonia)).tw,kf.
8	COVID-19.rx,px,ox. or severe acute respiratory syndrome coronavirus 2.os.
9	or/6-8
10	5 or 9
11	immunoglobulins/ or antibodies/ or antibodies, blocking/ or exp antibodies, neutralizing/ or antibodies, viral/ or antigen-antibody complex/ or immune sera/ or exp immunoglobulin isotypes/ or immunoglobulin a/ or immunoglobulin d/ or immunoglobulin e/ or immunoglobulin g/ or immunoglobulin m/
12	serologic tests/ or complement fixation tests/ or hemagglutination inhibition tests/ or neutralization tests/
13	immunoassay/ or fluoroimmunoassay/ or exp immunoblotting/ or immunoenzyme techniques/ or exp enzyme-linked immunosorbent assay/ or exp enzyme-linked immunosorbent assay/ or immunosorbent techniques/ or serologic tests/ or complement fixation tests/ or hemagglutination inhibition tests/ or neutralization tests/ or Serology/di
14	(enzyme linked immunosorbent or enzyme-linked immunosorbent or ELISA or immunofluorescence or complement fixation or hemagglutination inhibition or immunoblot or western blot or neutrali*).tw,kf.
15	(antibod* or immunoglobulin* or immune globulin* or titer* or isotype* or IgG or IgM or IgA or neutrali* or sera or serum or serolog* or saliva).tw,kf.
16	or/11-14
17	seroepidemiologic studies/
18	incidence/ or prevalence/
19	(seroconver* or seroprevalence or sero-prevalence or seroincidence or sero-incidence or seroepidemiolog* or sero-epidemiolog*).mp.
20	(inciden* or prevalen* or count* or rate*).mp.
21	(serosurvey or sero-survey or screen* or diagnostic).mp.
22	(seroconver* or seroprevalence or sero-prevalence or seroincidence or sero-incidence or seroepidemiolog* or sero-epidemiolog* or inciden* or prevalen* or silent or asymptomatic or serosurvey or sero-survey).tw,kf.
23	or/17-21
24	10 and (16 and 23)
25	10 and 15
26	10 and 22
27	or/24-26
28	limit 27 to yr="2020-Current"
29	remove duplicates from 28

Database: Embase**Dates:** January 1, 2020 to December 31, 2020**Notes:** Covid-19 search terms were adapted from Ovid Expert Searches

#	Searches
1	exp Coronavirus/
2	exp Coronavirus Infections/
3	(coronavirus* or corona virus* or OC43 or NL63 or 229E or HKU1 or HCoV* or nCoV* or covid* or sars-cov* or sarscov* or Sars-coronavirus* or Severe Acute Respiratory Syndrome Coronavirus*).tw,kw.
4	or/1-3
5	4 not ((MERS or MERS-CoV or Middle East respiratory syndrome or camel* or dromedar* or equine or coronary or coronal or coidence* or covidien or influenza virus or HIV or bovine or calves or TGEV or feline or porcine or BCoV or PED or PEDV or PDCoV or FIPV or FCoV or SADS-CoV or canine or CCov or zoonotic or avian influenza or H1N1 or H5N1 or H5N6 or IBV).mp. or (animals/ not humans/))
6	((pneumonia or covid* or coronavirus* or corona virus* or nCoV* or 2019-nCoV or sars*).tw,kw. or exp pneumonia/) and Wuhan.tw,kw.
7	(2019-nCoV or nCoV19 or nCoV-19 or 2019-novel CoV or sars-cov2 or sars-cov-2 or sarscov2 or sarscov-2 or Sars-coronavirus2 or Sars-coronavirus-2 or SARS-like coronavirus* or coronavirus-19 or covid19 or covid-19 or covid 2019 or ((novel or new or nouveau) adj2 (CoV or nCoV or covid or coronavirus* or corona virus or Pandemi*2)) or ((covid or covid19 or covid-19) and pandemic*2) or (coronavirus* and pneumonia)).tw,kw.
8	(coronavirus disease 2019 or severe acute respiratory syndrome coronavirus 2).sh,dj.
9	6 or 7 or 8
10	5 or 9
11	virus antibody/ec [Endogenous Compound]
12	neutralizing antibody/ec [Endogenous Compound]
13	exp immunoglobulin/ or exp immunoglobulin A antibody/ or exp immunoglobulin class/ or exp immunoglobulin M antibody/ or exp immunoglobulin G antibody/ or exp immunoglobulin antibody/
14	11 or 12 or 13
15	serology/
16	serodiagnosis/ or complement fixation test/ or hemagglutination inhibition test/ or hemolytic plaque assay/
17	fluorescent antibody technique/
18	immunofluorescence test/ or viral disease immunofluorescence assay/
19	enzyme linked immunosorbent assay/
20	western blotting/
21	(enzyme linked immunosorbent or enzyme-linked immunosorbent or ELISA or immunoassay or immunofluorescence or fluorescent antibody or complement fixation or hemagglutination inhibition or hemolytic plaque assay or immunoblot or western blot or neutrali*).tw,kw.
22	(antibod* or immunoglobulin* or immune globulin* or titer* or isotype* or IgG or IgM or IgA or neutrali* or sera or serolog* or serum or saliva).tw,kw.
23	15 or 16 or 17 or 18 or 19 or 20 or 21
24	14 or 23
25	exp seroepidemiology/
26	*prevalence/
27	*incidence/
28	(seroconver* or seroprevalence or sero-prevalence or seroincidence or sero-incidence or seroepidemiolog* or sero-epidemiolog* or inciden* or prevalen* or count* or rate* or serosurvey or sero-survey or screen* or diagnostic).mp.
29	(seroconver* or seroprevalence or sero-prevalence or seroincidence or sero-incidence or seroepidemiolog* or sero-epidemiolog* or inciden* or prevalen* or silent or asymptomatic or serosurvey or sero-survey).tw,kw.
30	25 or 26 or 27 or 28
31	10 and (24 and 30)
32	10 and 22
33	10 and 29
34	31 or 32 or 33
35	limit 34 to yr="2020-Current"
36	remove duplicates from 35

Database: Web of Science Core Collection

Date: January 1, 2020 to December 31, 2020

#	Searches
1	TS=(coronavirus* or corona virus* or OC43 or NL63 or 229E or HKU1 or HCoV* or nCoV* or covid* or sars-cov* or sarscov* or Sars-coronavirus* or Severe Acute Respiratory Syndrome Coronavirus*)
2	TS=(MERS or MERS-CoV or Middle East respiratory syndrome or camel* or dromedar* or equine or coronary or coronal or coidence* or covidien or influenza virus or HIV or bovine or calves or TGEV or feline or porcine or BCoV or PED or PEDV or PDCoV or FIPV or FCoV or SADS-CoV or canine or CCov or zoonotic or avian influenza or H1N1 or H5N1 or H5N6 or IBV)
3	#1 NOT #2
4	TS=((pneumonia or covid* or coronavirus* or corona virus* or nCoV* or 2019-nCoV or sars* or virus) AND Wuhan)
5	TS=(2019-nCoV* or 2019nCoV* or nCoV19 or nCoV-19 or 2019-novel CoV or sars-cov2* or sars-cov-2* or sarscov2* or sarscov-2* or Sars-coronavirus2 or Sars-coronavirus-2 or SARS-like coronavirus* or corona or coronavirus-19 or covid19 or covid-19 or covid 2019 or ((novel or new or nouveau) adj2 (CoV or nCoV or covid or coronavirus*)) or (coronavirus* and pneumonia)).
6	TS=(COVID-19 or "severe acute respiratory syndrome coronavirus")
7	#6 OR #5 OR #4 OR #3
8	TS=(antibod* or immunoglobulin* or immune globulin* or titer* or isotype* or IgG or IgM or IgA or neutralization or sera or serolog* or saliva or serum).
9	TS=("enzyme linked immunosorbent assay" or "enzyme-linked immunosorbent assay" or "immunoenzyme" or ELISA or "lateral flow immunoassay" or LFIA or "immunofluorescence assay" or immunochromatography or "complement fixation test" or "hemagglutination inhibition" or immunoblot or "western blot" or "neutralization assay")
10	#9 OR #8
11	TI=(seroconversion or seroprevalence or seroincidence or seroepidemiolog* or incidence or prevalence or asymptomatic or sero-survey*) or AK=(seroconversion or seroprevalence or seroincidence or seroepidemiolog* or incidence or prevalence or asymptomatic or sero-survey*)
12	ALL=(prevalence or incidence or seroconversion or seroconvert or seroprevalence or seroincidence or seroepidemiolog* or serosurvey or sero-survey or survey or screen* or diagnostic test)
13	#12 AND #10 AND #7
14	#11 AND #7
15	TI=(antibod* or immunoglobulin* or immune globulin* or titer* or isotype* or IgG or IgM or IgA or neutralization or sera or serolog* or saliva or serum).
16	#15 AND #7
17	#16 OR #14 OR #13

Database: Europe PMC [Secondary search for pre-prints]

Dates: January 1, 2020 to December 31, 2020

#	Searches
	("2019-nCoV" OR "2019nCoV" OR "COVID-19" OR "SARS-CoV-2" OR "COVID19" OR "COVID" OR "SARS-nCoV" OR ("wuhan" AND "coronavirus") OR "Coronavirus" OR "Corona virus" OR "corona-virus" OR "corona viruses" OR "coronaviruses" OR "SARS-CoV" OR "Severe Acute Respiratory Syndrome Coronavirus" OR ("SARS" AND "coronavirus")) AND ABSTRACT:(sera* OR sero* OR immun* OR Ig* OR "enzyme-linked immunosorbent assay" OR ELISA OR "neutralization assay" OR seroprevalence) AND (SRC:"PPR")

Sources: Health organizations

Dates: January 1, 2020 to December 31, 2020

Source	Search strategy	
WHO Situation Reports	1	"antibod", "sero", "immun", "ELISA"
National Institutes of Health	1	("COVID" OR "SARS-CoV-2")
	2	("sero*" OR "antibod*" OR "immun*" OR "RDT" OR "ELISA" OR "LFIA")
	3	allintext:(1 AND 2) site:nih.gov -site:ncbi.nlm.nih.gov
	3	2 AND 3
United States Centres for Disease Control and Prevention	1	("COVID" OR "SARS-CoV-2")
	2	("sero*" OR "antibod*" OR "immun*" OR "RDT" OR "ELISA" OR "LFIA")
	3	allintext:(1 AND 2) site:cdc.gov
	5	2 AND 3
European Centres for Disease Control and Prevention	1	("COVID" OR "SARS-CoV-2")
	2	("sero*" OR "antibod*" OR "immun*" OR "RDT" OR "ELISA" OR "LFIA")
	3	allintext:(1 AND 2) site:ecdc.europa.eu
	5	2 AND 3

Sources: Google News

Dates: January 1, 2020 to December 31, 2020

Source	Search strategy	
Google news	1	(antibody OR antibodies OR surveillance OR screen OR serology OR serological OR serosurvey OR ELISA OR LFIA OR assay OR blood OR serum OR immune OR immunity OR herd immunity OR random test)

S3. Detailed eligibility criteria

This study included eligible studies from the SeroTracker database. Eligibility criteria for the database and also for this review specifically are outlined below:

Eligibility criteria for inclusion in SeroTracker database	Eligibility criteria for inclusion in this review
Study performed serologic testing to determine the prevalence of SARS-CoV-2 antibodies in a human population over a specified time period.	Studies included in the SeroTracker database (https://serotracker.com) with relevant subgrouping (i.e., "Occupation," or "Employment status") and/or sample frame variables (i.e., "Healthcare workers and caregivers," "Non-essential workers and unemployed persons," "Essential non-healthcare workers," or "Multiple populations") variables. We also manually searched for potentially relevant studies not falling into these categories.
Reported sample size, sampling date, location and prevalence.	Study published between January 01 and December 31, 2020.
Article in English or French or could be fully extracted using machine translation.	Article written in English or French or machine-translatable using Google Translate.
Article did not report identical information to previously included studies (peer-reviewed studies were prioritised over news stories and pre-prints where available).	Reported seroprevalence data that could be fit into the 23 major SOC 2010 occupation categories or combined categories for healthcare workers, first-responders or unemployed persons. Studies that only reported seroprevalence for mixed occupation groups or workplaces rather than specific occupations (e.g., "hospital staff") were excluded.
Studies conducted only in people previously diagnosed with COVID-19 (molecular or antigen testing, or clinical or self-assessment).	Seroprevalence estimates did not include people <18 years (i.e., possibly affected by COVID-19 exposure at school, which could impact occupational seroprevalence estimates).
Cohort or cross-sectional design (case reports, case-control studies, trials, and reviews were excluded, as were dashboards not associated with a defined serology study).	

S4. Tool for assessing study risk of bias

Item 1: Was the sample frame appropriate to address the target population?	
Yes	Sample frame described and it approximated the target population
No	Sample frame did not approximate the target population (e.g., blood donors do not represent general population, doctors do not represent all health care providers)
Exclude	Sample frame not described
*Notes	The term “target population” should not be taken to infer every individual from everywhere or with similar disease or exposure characteristics. Instead, give consideration to specific population characteristics in the study, including age range, gender, morbidities, medications, and other potentially influential factors. For example, a sample frame may not be appropriate to address the target population if a certain group has been used (such as those working for one organisation, or one profession) and the results then inferred to the target population (i.e. working adults). A sample frame may be appropriate when it includes almost all the members of the target population (i.e. a census, or a complete list of participants or complete registry data).

Item 2: Were study participants recruited in an appropriate way?	
Yes	Probability sampling method (simple or stratified random) or entire sample (e.g., an entire town) was used
No	Non-probability sampling
Exclude	Sampling method not reported

Item 3: Was the sample size adequate?	
Yes	≥599
No	<599
Exclude	Sample size not reported
*Notes	<p>To calculate the required sample size we used an assumed prevalence of 2.5%, which was the global average estimated by the WHO in April, 2020.¹ Based on guidance by the Joanna Briggs Institute and published medical statistical recommendations we selected a precision value that was half the assumed prevalence (1.25%) [2,3]. We calculated a minimum sample size of 599 using these inputs:</p> <p>Sample size calculation: $n = \frac{Z^2 P(1-P)}{d^2}$</p> <p>Where n = sample size; Z = Z statistic for level of confidence (95%); P = expected prevalence (2.5% WHO global estimate); d = precision (1.25%)</p> <p>In cases where the sample size calculation was provided and the required sample for 80% power was below our threshold (n<599), this item was marked as yes.</p>

Item 4: Were the study subjects and setting described in detail?	
Yes	Average age and distribution of gender/sex provided
No	Neither age or gender/sex is provided, or only one of age and gender/sex is provided

Item 5: Was data analysis conducted with sufficient coverage of the identified sample?	
Yes	The demographic characteristics (gender/sex, age, and ethnicity) of the sample is at least somewhat representative of the population
No	The demographic characteristics (gender/sex, age, and ethnicity) of the sample is not representative of the population

Unclear	Information is not provided about demographic characteristics of the sample (gender/sex, age, and ethnicity)
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Item 6: Were valid methods used for the identification of the condition?	
Yes	The test used met the FDA standards for Emergency Use Authorizations for COVID-19 serological tests: sensitivity minimum 90%, specificity minimum 95%, as reported in the study [4].
No	The test used did not meet the FDA standards for Emergency Use Authorizations for COVID-19 serological tests: sensitivity minimum 90%, specificity minimum 95%.
Exclude	Test sensitivity and specificity not reported

Item 7: Was the condition measured in a standard, reliable way for all participants?	
Yes	The same serology test was used for all participants
No	Different serology tests were used for participants
Unclear	No details were provided about which participants received which serology tests

Item 8: Was there appropriate statistical analysis?	
Yes	Does all of the following: corrects for population characteristics or the sample is somewhat representative of the population (probability sampling), corrects for test characteristics), and provides the information necessary to determine the numerator, denominator, prevalence estimate, and confidence interval.
No	Does not correct for population characteristics and the sample is not likely representative of the population (non-probability sampling), does not correct for test or provide the information necessary to correct for test characteristics, or does not provide the information necessary to determine the numerator, denominator, prevalence estimate, and confidence interval.

Item 9: Was the response rate adequate, and if not, was the low response rate managed appropriately?	
Yes	Response rate > 60% or the demographics of the sample were a reasonable match to those of the target population [5]
No	Response rate < 60% and the demographics of the sample were not a reasonable match to those of the target population
Unclear	Response rate not provided and it was unclear if the demographics of the sample differed from the target population

Item 10: Overall risk of bias	
Low	The estimates are very likely correct for the target population. To obtain a low risk of bias classification, all criteria must be met or departures from the criteria must be minimal and unlikely to impact on the validity and reliability of the prevalence estimate. These include sample sizes that are just below the threshold when all other criteria are met, reporting only some of characteristics of the sample, test characteristics below the threshold but corrections for the test performance, and response rates that are just below the threshold in the context of probability based sampling of an appropriate sampling frame with population weighted seroprevalence estimates.
Moderate	The estimates are likely correct for the target population. To obtain a moderate risk of bias classification, most criteria must be met and departures from the criteria are likely to have only a small impact on the validity and reliability of the prevalence estimates.
High	The estimates are not likely correct for the target population. To obtain a high risk of bias, many criteria must not be met or departures from criteria are likely to have a major impact on the validity and reliability of the prevalence estimates.
Unclear	There was insufficient information to assess the risk of bias.

S5. Details of occupational coding

For each seroprevalence estimate, we identified the relevant Standard Occupational Classification (SOC) 2010 codes. This was done by applying the National Institute for Occupational Safety & Health (NIOSH) Industry and Occupation Computerized Coding System (NIOCCS) to text occupation descriptions extracted by members of the research team. There is no standard cut-off for manually verifying results from the National Institute for Occupational Safety & Health (NIOSH) Industry and Occupation Computerized Coding System (NIOCCS). However, NIOCCS reports the probability of correct classification to the six-digit level. After manually verifying a subset of records from the first round of classification, we decided to manually perform a second round of classification for any observations for which the probability of correct classification was <0.8 . This cut-off was chosen based on the observation that most codes with a probability of correct classification to of ≥ 0.8 to the six-digit level were correctly coded at the two- and three-digit level, which we used in our main analyses and are more likely to be coded correctly than the more granular, 6-digit codes and consideration of the number of records that could feasibly be verified manually

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4 **16** **References for supplementary files**

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Supplementary File I. List of all estimates, included studies and references

SOC 2010 Major Group	Study	N	SOC 2010 Occupation Title	Study Type	Study Dates	Country	Serum positive prevalence (95% CIs)	Overall Risk of Bias (JBI)
Not employed (mixed)*	Merkely et al., 2020 ¹	n=209	Homemaker (Unpaid)	Cross-sectional survey	05/01 - 05/16	Hungary	0.73% (0-1.74%)	Moderate
Not employed (mixed)*	Siddiqui et al., 2020 ²	n=37	Homemaker (Unpaid)	Prospective cohort	04/15 - 08/15	India	18.9%	High
Not employed (mixed)*	Biggs et al., 2020 ³	n=157	Retired (Unpaid)	Cross-sectional survey	04/28 - 05/03	United States of America	1.91%	Moderate
Not employed (mixed)*	Carrat et al., 2020 ⁴	n=5381	Retired (Unpaid)	Prospective cohort	05/04 - 06/23	France	4.3% (3.5-5%)	Moderate
Not employed (mixed)*	Merkely et al., 2020 ¹	n=2767	Retired (Unpaid)	Cross-sectional survey	05/01 - 05/16	Hungary	1.09% (0.66-1.52%)	Moderate
Not employed (mixed)*	Richard et al., 2020 ⁵	n=1635	Retired (Unpaid)	Cross-sectional survey	04/06 - 06/30	Switzerland	4.3%	Low
Not employed (mixed)*	Siddiqui et al., 2020 ²	n=10	Retired (Unpaid)	Prospective cohort	04/15 - 08/15	India	20%	High
Not employed (mixed)*	Alemu et al., 2020 ⁶	n=32	Student (Unpaid)	Cross-sectional survey	04/23 - 04/28	Ethiopia	15.6%	Moderate
Not employed (mixed)*	Biggs et al., 2020 ³	n=16	Student (Unpaid)	Cross-sectional survey	04/28 - 05/03	United States of America	12.5%	Moderate
Not employed (mixed)*	Brehm et al., 2020 ⁷	n=73	Student (Unpaid)	Cross sectional study with prospective cohort follow up of a subset of the sample	03/20 - 07/17	Germany	2.7%	Moderate
Not employed (mixed)*	Carrat et al., 2020 ⁴	n=81	Student (Unpaid)	Prospective cohort	05/04 - 06/23	France	7.2% (0.1-12.6%)	Moderate

Not employed (mixed)*	Iversen et al., 2020 ⁸	n=688	Student (Unpaid)	Cross-sectional survey	04/15 - 04/22	Denmark	14.97%	Low
Not employed (mixed)*	Lumley et al., 2020 ⁹	n=620	Student (Unpaid)	Prospective cohort	04/23 - 11/30	The United Kingdom	6.77%	Moderate
Not employed (mixed)*	Merkely et al., 2020 ¹	n=774	Student (Unpaid)	Cross-sectional survey	05/01 - 05/16	Hungary	0.69% (0-1.49%)	Moderate
Not employed (mixed)*	Richard et al., 2020 ⁵	n=666	Student (Unpaid)	Cross-sectional survey	04/06 - 06/30	Switzerland	10.5%	Low
Not employed (mixed)*	Shakiba et al., 2020 ¹⁰	n=114	Student (Unpaid)	Cross-sectional survey	04/11 - 04/19	Iran (Islamic Republic of)	17.5% (11.3-23.7%)	Moderate
Not employed (mixed)*	Siddiqui et al., 2020 ²	n=14	Student (Unpaid)	Prospective cohort	04/15 - 08/15	India	21.4%	High
Not employed (mixed)*	Tilley et al., 2020 ¹¹	n=790	Student (Unpaid)	Cross-sectional survey	04/29 - 05/08	United States of America	4% (3-5.1%)	Moderate
Not employed (mixed)*	Tsitsilonis et al., 2020 ¹²	n=1395	Student (Unpaid)	Cross-sectional survey	06/15 - 07/15	Greece	0.42% (0.03-1.5%)	Moderate
Not employed (mixed)*	Arnaldo et al., 2020 ¹³	n=513	Military, Rank Not Specified	Cross-sectional survey	07/06 - 07/13	Mozambique	3.7%	High
Not employed (mixed)*	Arnaldo et al., 2020 ¹⁴	n=116	Military, Rank Not Specified	Cross-sectional survey	11/02 - 11/12	Mozambique	1.7%	High
Not employed (mixed)*	Mabunda et al., 2020 ¹⁵	n=324	Military, Rank Not Specified	Cross-sectional survey	09/21 - 10/02	Mozambique	2.8%	High
Not employed (mixed)*	Mahomed et al., 2020 ¹⁶	n=116	Military, Rank Not Specified	Cross-sectional survey	11/26 - 12/03	Mozambique	18.1%	High
Not employed (mixed)*	Payne et al., 2020 ¹⁷	n=382	Military, Rank Not Specified	Cross-sectional survey	04/20 - 04/24	United States of America	59.7%	High
Not employed (mixed)*	World et al., 2020 ¹⁸	n=6900	Military, Rank Not Specified	Cross-sectional survey	08/15 - 10/15	Republic of Korea	0.36%	Unclear
Management Occupations (11-0000)	Shakiba et al., 2020 ¹⁰	n=16	Farmers, Ranchers, and Other Agricultural Managers	Cross-sectional survey	04/11 - 04/19	Iran (Islamic Republic of)	19.7% (9.1-31%)	Moderate
Management Occupations (11-	Favara et al., 2020 ¹⁹	n=43	Medical and Health Services Managers	Cross-sectional survey	07/13 - 07/13	The United Kingdom	9.3%	High

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Management Occupations (11-0000)	Galan et al., 2020 ²⁰	n=170	Medical and Health Services Managers	Cross-sectional survey	04/14 - 04/27	Spain	27.6%	High
Management Occupations (11-0000)	Hunter et al., 2020 ²¹	n=44	Medical and Health Services Managers	Cross-sectional survey	04/29 - 05/08	United States of America	4.55%	High
Management Occupations (11-0000)	Leidner et al., 2020 ²²	n=257	Medical and Health Services Managers	Cross sectional study with prospective cohort follow up of a subset of the sample	04/08 - 05/22	United States of America	3.11%	High
Management Occupations (11-0000)	Martin et al., 2020 ²³	n=2078	Medical and Health Services Managers	Cross-sectional survey	05/29 - 07/13	The United Kingdom	6.79%	Moderate
Management Occupations (11-0000)	Siddiqui et al., 2020 ²	n=15	Medical and Health Services Managers	Prospective cohort	04/15 - 08/15	India	20%	High
Management Occupations (11-0000)	Baracco et al., 2020 ²⁴	n=45	Managers, All Other	Cross-sectional survey	04/23 - 05/05	Italy	6.67%	High
Management Occupations (11-0000)	Goenka et al., 2020 ²⁵	n=71	Managers, All Other	Cross-sectional survey	07/12 - 08/23	India	7.04%	Moderate
Management Occupations (11-0000)	Goenka et al., 2020 ²⁶	n=13	Managers, All Other	Cross-sectional survey	08/01 - 08/31	India	38.46%	High
Business and Financial Operations Occupations (13-0000)	Satpati et al., 2020 ²⁷	n=43	Management Analysts	Cross-sectional survey	07/26 - 08/08	India	2.33%	Moderate
Business and Financial	Poustchi et al., 2020 ²⁸	n=880	Financial Specialists	Cross-sectional survey	04/17 - 06/02	Iran (Islamic Republic of)	14.2% (12.1-16.5%)	Moderate

Operations Occupations (13-0000)								
Computer and Mathematical Occupations (15-0000)	Biggs et al., 2020 ³	n=47	Computer User Support Specialists	Cross-sectional survey	04/28 - 05/03	United States of America	0%	Moderate
Architecture and Engineering Occupations (17-0000)	Siddiqui et al., 2020 ²	n=21	Engineers	Prospective cohort	04/15 - 08/15	India	42.9%	High
Life, Physical, and Social Science Occupations (19-0000)	Jones et al., 2020 ²⁹	n=245	Medical Scientists	Cross-sectional survey	01/15 - 06/15	The United Kingdom	1.9%	High
Life, Physical, and Social Science Occupations (19-0000)	Anna et al., 2020 ³⁰	n=505	Medical Scientists, Except Epidemiologists	Prospective cohort	04/28 - 07/31	France	8.71%	Moderate
Life, Physical, and Social Science Occupations (19-0000)	Erber et al., 2020 ³¹	n=635	Medical Scientists, Except Epidemiologists	Cross-sectional survey	04/14 - 05/29	Germany	1.24%	High
Life, Physical, and Social Science Occupations (19-0000)	Favara et al., 2020 ¹⁹	n=38	Medical Scientists, Except Epidemiologists	Cross-sectional survey	07/13 - 07/13	The United Kingdom	2.6%	High
Life, Physical, and Social Science Occupations (19-0000)	Hanrath et al., 2020 ³²	n=468	Medical Scientists, Except Epidemiologists	Cross-sectional survey	05/29 - 07/06	The United Kingdom	6.2%	High
Life, Physical, and Social Science Occupations (19-0000)	Leidner et al., 2020 ²²	n=2654	Medical Scientists, Except Epidemiologists	Cross sectional study with prospective cohort follow up of a subset of the sample	04/08 - 05/22	United States of America	2.22%	High

Life, Physical, and Social Science Occupations (19-0000)	Martin et al., 2020 ²³	n=1154	Medical Scientists, Except Epidemiologists	Cross-sectional survey	05/29 - 07/13	The United Kingdom	9.71%	Moderate
Life, Physical, and Social Science Occupations (19-0000)	Rosser et al., 2020 ³³	n=102	Medical Scientists, Except Epidemiologists	Cross-sectional survey	04/20 - 05/20	United States of America	0.98%	High
Life, Physical, and Social Science Occupations (19-0000)	Silva et al., 2020 ³⁴	n=69	Chemists	Cross-sectional survey	06/05 - 07/31	Brazil	4%	High
Life, Physical, and Social Science Occupations (19-0000)	Tsitsilonis et al., 2020 ¹²	n=250	Physical Scientists, All Other	Cross-sectional survey	06/15 - 07/15	Greece	1.42% (0-7.24%)	Moderate
Community and Social Service Occupations (21-0000)	Jones et al., 2020 ²⁹	n=211	Healthcare Social Workers	Cross-sectional survey	01/15 - 06/15	The United Kingdom	6.3%	High
Community and Social Service Occupations (21-0000)	Leidner et al., 2020 ²²	n=235	Social Workers, All Other	Cross sectional study with prospective cohort follow up of a subset of the sample	04/08 - 05/22	United States of America	3.4%	High
Community and Social Service Occupations (21-0000)	Rosser et al., 2020 ³³	n=117	Social Workers, All Other	Cross-sectional survey	04/20 - 05/20	United States of America	1.71%	High
Community and Social Service Occupations (21-0000)	Sabourin et al., 2020 ³⁵	n=91	Social Workers, All Other	Cross-sectional survey	07/15 - 08/15	United States of America	5.49%	High
Community and Social Service	Yogo et al., 2020 ³⁶	n=35	Social Workers, All Other	Cross-sectional survey	05/20 - 06/08	United States of America	0%	High

Occupations (21-0000)								
Community and Social Service Occupations (21-0000)	Biggs et al., 2020 ³	n=6	Religious Workers	Cross-sectional survey	04/28 - 05/03	United States of America	16.67%	Moderate
Education, Training, and Library Occupations (25-0000)	Campos et al., 2020 ³⁷	n=2715	Postsecondary Teachers	Cross-sectional survey	05/13 - 07/10	Portugal	2.6%	High
Education, Training, and Library Occupations (25-0000)	Goncalves et al., 2020 ³⁸	n=1636	Postsecondary Teachers	Cross-sectional survey	06/15 - 06/30	Portugal	3.05%	Moderate
Education, Training, and Library Occupations (25-0000)	Tsitsilonis et al., 2020 ¹²	n=312	Postsecondary Teachers	Cross-sectional survey	06/15 - 07/15	Greece	1.2% (0.14-3.7%)	Moderate
Education, Training, and Library Occupations (25-0000)	Fontanet et al., 2020 ³⁹	n=42	Elementary and Middle School Teachers	Retrospective cohort	04/28 - 04/30	France	7.1%	Moderate
Education, Training, and Library Occupations (25-0000)	Siddiqui et al., 2020 ²	n=8	Elementary and Middle School Teachers	Prospective cohort	04/15 - 08/15	India	25%	High
Education, Training, and Library Occupations (25-0000)	Torres et al., 2020 ⁴⁰	n=165	Elementary and Middle School Teachers	Cross-sectional survey	05/04 - 05/19	Chile	20.6% (14.7-27.6%)	High

1 2 3 4 5 6 7	Arts, Design, Entertainment, Sports, and Media Occupations (27-0000)	Halatoko et al., 2020 ⁴¹	n=55	Fine Artists, Including Painters, Sculptors, and Illustrators	Cross-sectional survey	04/23 - 05/08	Togo	0%	High
8 9 10 11 12 13	Arts, Design, Entertainment, Sports, and Media Occupations (27-0000)	Slusser et al., 2020 ⁴²	n=5603	Athletes, Coaches, Umpires, and Related Workers	Cross-sectional survey	04/08 - 04/21	United States of America	0.7% (0.28-1.15%)	Unclear
14 15 16 17 18	Arts, Design, Entertainment, Sports, and Media Occupations (27-0000)	Vince et al., 2020 ⁴³	n=272	Athletes, Coaches, Umpires, and Related Workers	Prospective cohort	05/29 - 07/31	Croatia	14%	Moderate
19 20 21 22 23	Arts, Design, Entertainment, Sports, and Media Occupations (27-0000)	Vince et al., 2020 ⁴³	n=43	Coaches and Scouts	Prospective cohort	05/29 - 07/31	Croatia	16.3%	Moderate
24 25 26 27 28	Arts, Design, Entertainment, Sports, and Media Occupations (27-0000)	Mack et al., 2020 ⁴⁴	n=1007	Umpires, Referees, and Other Sports Officials	Prospective cohort	06/16 - 06/30	Germany	2.09% (1.37-3.17%)	High
29 30 31 32 33	Arts, Design, Entertainment, Sports, and Media Occupations (27-0000)	Khan et al., 2020 ⁴⁵	n=44	Media and Communication Workers	Cross-sectional survey	07/01 - 07/15	India	0%	Moderate
34 35 36 37 38 39	Healthcare Practitioners and Technical Occupations (29-0000)	Akinbami et al., 2020 ⁴⁶	n=566	Healthcare Practitioners and Technical Occupations	Cross-sectional survey	05/18 - 06/13	United States of America	4.6% (3-6.7%)	Moderate

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Healthcare Practitioners and Technical Occupations (29-0000)	Khan et al., 2020 ⁴⁵	n=355	Healthcare Practitioners and Technical Occupations	Cross-sectional survey	07/01 - 07/15	India	4.8% (3-7.6%)	Moderate
Healthcare Practitioners and Technical Occupations (29-0000)	Leidner et al., 2020 ²²	n=402	Healthcare Practitioners and Technical Occupations	Cross sectional study with prospective cohort follow up of a subset of the sample	04/08 - 05/22	United States of America	1.49%	High
Healthcare Occupations (mixed)*	Hanrath et al., 2020 ³²	n=102	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	05/29 - 07/06	The United Kingdom	6.62%	High
Healthcare Occupations (mixed)*	Jones et al., 2020 ²⁹	n=413	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	01/15 - 06/15	The United Kingdom	7.8%	High
Healthcare Occupations (mixed)*	Martin et al., 2020 ²³	n=550	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	05/29 - 07/13	The United Kingdom	10.36%	Moderate
Healthcare Occupations (mixed)*	Amendola et al., 2020 ⁴⁷	n=117	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	04/15 - 04/15	Italy	4.27%	High
Healthcare Occupations (mixed)*	Arnaldo et al., 2020 ⁴⁸	n=543	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	08/10 - 08/21	Mozambique	3.7%	High

Healthcare Occupations (mixed)*	Bal et al., 2020 ⁴⁹	n=190	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	04/10 - 05/28	France	3.68%	High
Healthcare Occupations (mixed)*	Barallat et al., 2020 ⁵⁰	n=429	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	05/04 - 05/22	Spain	7.69%	High
Healthcare Occupations (mixed)*	Bardai et al., 2020 ⁵¹	n=35	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	06/10 - 07/27	Canada	11%	High
Healthcare Occupations (mixed)*	Bardai et al., 2020 ⁵¹	n=20	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	06/10 - 07/27	Canada	15%	High
Healthcare Occupations (mixed)*	Bardai et al., 2020 ⁵¹	n=44	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	06/10 - 07/27	Canada	11%	High
Healthcare Occupations (mixed)*	Bardai et al., 2020 ⁵¹	n=99	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	06/10 - 07/27	Canada	12%	High
Healthcare Occupations (mixed)*	Biggs et al., 2020 ³	n=59	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	04/28 - 05/03	United States of America	10.17%	Moderate

Healthcare Occupations (mixed)*	Blairon et al., 2020 ⁵²	n=588	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	05/25 - 06/19	Belgium	19.2%	High
Healthcare Occupations (mixed)*	Borraz et al., 2020 ⁵³	n=289	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Prospective cohort	03/20 - 04/21	Spain	5.88%	High
Healthcare Occupations (mixed)*	Brunner et al., 2020 ⁵⁴	n=762	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	05/04 - 05/29	United States of America	4.5%	High
Healthcare Occupations (mixed)*	Brunner et al., 2020 ⁵⁴	n=764	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	05/04 - 05/29	United States of America	2%	High
Healthcare Occupations (mixed)*	Carozzi et al., 2020 ⁵⁵	n=17098	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	04/01 - 04/30	Italy	3.1%	High
Healthcare Occupations (mixed)*	Carrat et al., 2020 ⁴	n=568	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Prospective cohort	05/04 - 06/23	France	11.6% (8.3-14.4%)	Moderate
Healthcare Occupations (mixed)*	Cavlek et al., 2020 ⁵⁶	n=558	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	04/25 - 05/24	Croatia	1.25%	High

Healthcare Occupations (mixed)*	Chibwana et al., 2020 ⁵⁷	n=500	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Prospective cohort	05/22 - 06/19	Malawi	12.3% (8.2-16.5%)	High
Healthcare Occupations (mixed)*	Coffman et al., 2020 ⁵⁸	n=1100	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	07/01 - 07/31	United States of America	2.2%	Unclear
Healthcare Occupations (mixed)*	Cooper et al., 2020 ⁵⁹	n=118	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	06/10 - 08/07	The United Kingdom	8.47%	Moderate
Healthcare Occupations (mixed)*	Cooper et al., 2020 ⁵⁹	n=27	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	06/10 - 08/07	The United Kingdom	14.81%	Moderate
Healthcare Occupations (mixed)*	Cooper et al., 2020 ⁵⁹	n=24	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	06/10 - 08/07	The United Kingdom	12.5%	Moderate
Healthcare Occupations (mixed)*	Cooper et al., 2020 ⁵⁹	n=1068	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	06/10 - 08/07	The United Kingdom	5.43%	Moderate
Healthcare Occupations (mixed)*	Cooper et al., 2020 ⁵⁹	n=174	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	06/10 - 08/07	The United Kingdom	5.75%	Moderate

Healthcare Occupations (mixed)*	Cooper et al., 2020 ⁵⁹	n=319	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	06/10 - 08/07	The United Kingdom	11.29%	Moderate
Healthcare Occupations (mixed)*	Cooper et al., 2020 ⁵⁹	n=5698	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	06/10 - 08/07	The United Kingdom	7.2%	Moderate
Healthcare Occupations (mixed)*	Cooper et al., 2020 ⁵⁹	n=412	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	06/10 - 08/07	The United Kingdom	4.61%	Moderate
Healthcare Occupations (mixed)*	Denyer et al., 2020 ⁶⁰	n=5850	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	05/12 - 05/18	Japan	1.79%	Unclear
Healthcare Occupations (mixed)*	Dimeglio et al., 2020 ⁶¹	n=8758	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	06/10 - 07/10	France	3.2% (2.8-3.5%)	High
Healthcare Occupations (mixed)*	Erber et al., 2020 ³¹	n=603	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	04/14 - 05/29	Germany	2.8%	High
Healthcare Occupations (mixed)*	Fuereder et al., 2020 ⁶²	n=62	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Retrospective cohort	04/01 - 06/04	Austria	3.2% (0.4-11.2%)	High

Healthcare Occupations (mixed)*	Fusco et al., 2020 ⁶³	n=115	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	03/23 - 04/02	Italy	1.74%	High
Healthcare Occupations (mixed)*	Geraci et al., 2020 ⁶⁴	n=230	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	03/16 - 05/20	United States of America	2.17%	High
Healthcare Occupations (mixed)*	Gudo et al., 2020 ⁶⁵	n=1427	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	06/17 - 06/30	Mozambique	7% (6-9%)	High
Healthcare Occupations (mixed)*	Hackner et al., 2020 ⁶⁶	n=130	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	04/01 - 04/30	Austria	2.3%	High
Healthcare Occupations (mixed)*	Halatoko et al., 2020 ⁴¹	n=370	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	04/23 - 05/08	Togo	1.4%	High
Healthcare Occupations (mixed)*	Haq et al., 2020 ⁶⁷	n=76	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	06/15 - 06/29	Pakistan	35.5% (24.8-47.3%)	Moderate
Healthcare Occupations (mixed)*	He et al., 2020 ⁶⁸	n=1059	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Repeated cross sectional study	05/13 - 06/10	China	9.3%	High

Healthcare Occupations (mixed)*	Herzberg et al., 2020 ⁶⁹	n=871	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Prospective cohort	04/14 - 06/16	Germany	2.64%	High
Healthcare Occupations (mixed)*	Jeremias et al., 2020 ⁷⁰	n=100	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	03/01 - 04/30	United States of America	12%	High
Healthcare Occupations (mixed)*	Jespersen et al., 2020 ⁷¹	n=17948	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	05/18 - 06/19	Denmark	3.36% (2.38-3.82%)	Moderate
Healthcare Occupations (mixed)*	Kassem et al., 2020 ⁷²	n=74	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	06/01 - 06/14	Egypt	12.2%	High
Healthcare Occupations (mixed)*	Kern et al., 2020 ⁷³	n=1316	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	04/09 - 04/16	Germany	1.06% (0.58-1.78%)	High
Healthcare Occupations (mixed)*	Khalil et al., 2020 ⁷⁴	n=190	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	05/15 - 05/28	The United Kingdom	22%	High
Healthcare Occupations (mixed)*	Kumar et al., 2020 ⁷⁵	n=635	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Repeated cross sectional study	07/11 - 07/24	India	0%	High

Healthcare Occupations (mixed)*	Lackermair et al., 2020 ⁷⁶	n=151	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	04/02 - 04/06	Germany	2.6% (0.8-7.1%)	High
Healthcare Occupations (mixed)*	Lahner et al., 2020 ⁷⁷	n=1084	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	04/07 - 04/27	Italy	0.7%	High
Healthcare Occupations (mixed)*	Liu et al., 2020 ⁷⁸	n=116	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	02/07 - 04/21	China	0%	High
Healthcare Occupations (mixed)*	Liu et al., 2020 ⁷⁸	n=304	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	02/07 - 04/21	China	0%	High
Healthcare Occupations (mixed)*	Liu et al., 2020 ⁷⁹	n=3832	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	02/29 - 04/29	China	4% (3.4-4.7%)	Moderate
Healthcare Occupations (mixed)*	Lorenzo et al., 2020 ⁸⁰	n=38	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	05/02 - 05/31	Italy	5.3%	High
Healthcare Occupations (mixed)*	Mahomed et al., 2020 ⁸¹	n=569	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	08/31 - 10/12	Mozambique	0.7%	High

Healthcare Occupations (mixed)*	Mahumane et al., 2020 ⁸²	n=380	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	11/02 - 11/17	Mozambique	1.3%	High
Healthcare Occupations (mixed)*	Majdoubi et al., 2020 ⁸³	n=276	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	05/17 - 06/19	Canada	0.6% (0-2.71%)	High
Healthcare Occupations (mixed)*	Majiya et al., 2020 ⁸⁴	n=185	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	06/26 - 06/30	Nigeria	25.41%	Moderate
Healthcare Occupations (mixed)*	Majiya et al., 2020 ⁸⁴	n=43	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	06/26 - 06/30	Nigeria	37.21%	Moderate
Healthcare Occupations (mixed)*	Malfertheiner et al., 2020 ⁸⁵	n=139	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Prospective cohort	03/15 - 06/07	Germany	0%	High
Healthcare Occupations (mixed)*	Martin et al., 2020 ⁸⁶	n=326	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	04/15 - 05/18	Belgium	11%	High
Healthcare Occupations (mixed)*	Martin et al., 2020 ²³	n=4631	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	05/29 - 07/13	The United Kingdom	13.65%	Moderate

Healthcare Occupations (mixed)*	Melo et al., 2020 ⁸⁷	n=471	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	06/01 - 06/30	Brazil	13.59%	High
Healthcare Occupations (mixed)*	Morcuende et al., 2020 ⁸⁸	n=6	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	03/01 - 04/21	United States of America	0%	High
Healthcare Occupations (mixed)*	Moscola et al., 2020 ⁸⁹	n=8156	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	04/20 - 06/23	United States of America	11.6%	High
Healthcare Occupations (mixed)*	Nishida et al., 2020 ⁹⁰	n=49	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	06/12 - 06/19	Japan	0%	Moderate
Healthcare Occupations (mixed)*	Olalla et al., 2020 ⁹¹	n=498	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	04/15 - 04/25	Spain	2.2%	High
Healthcare Occupations (mixed)*	Pallett et al., 2020 ⁹²	n=504	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Prospective cohort	04/08 - 06/12	The United Kingdom	10.6% (7.6-13.6%)	High
Healthcare Occupations (mixed)*	Pere et al., 2020 ⁹³	n=3569	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	05/02 - 06/26	France	11.9%	High

Healthcare Occupations (mixed)*	Poulikakos et al., 2020 ⁹⁴	n=281	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	05/04 - 05/06	The United Kingdom	6%	High
Healthcare Occupations (mixed)*	Psichogiou et al., 2020 ⁹⁵	n=1495	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	04/13 - 05/15	Greece	1.26% (0.43-3.26%)	Moderate
Healthcare Occupations (mixed)*	Satpati et al., 2020 ²⁷	n=18	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	07/26 - 08/08	India	5.56%	Moderate
Healthcare Occupations (mixed)*	Seetharam et al., 2020 ⁹⁶	n=728	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	08/16 - 08/29	India	27.3% (24.1-30.6%)	Unclear
Healthcare Occupations (mixed)*	Shakiba et al., 2020 ¹⁰	n=43	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	04/11 - 04/19	Iran (Islamic Republic of)	14.5% (4.5-25%)	Moderate
Healthcare Occupations (mixed)*	Shields et al., 2020 ⁹⁷	n=516	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	04/24 - 04/25	The United Kingdom	24.4%	High
Healthcare Occupations (mixed)*	Silva et al., 2020 ⁹⁸	n=61	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	04/09 - 04/29	Brazil	4.91%	High

Healthcare Occupations (mixed)*	Solodky et al., 2020 ⁹⁹	n=85	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	03/01 - 04/16	France	5.88%	High
Healthcare Occupations (mixed)*	Soriano et al., 2020 ¹⁰⁰	n=108	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Retrospective cohort	04/26 - 05/16	Spain	13%	High
Healthcare Occupations (mixed)*	Statistica et al., 2020 ¹⁰¹	n=64660	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	05/25 - 07/15	Italy	2.5%	Unclear
Healthcare Occupations (mixed)*	Steensels et al., 2020 ¹⁰²	n=3056	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	04/22 - 04/30	Belgium	6.4% (5.5-7.3%)	High
Healthcare Occupations (mixed)*	Stock et al., 2020 ¹⁰³	n=98	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	04/04 - 04/20	United States of America	15.3%	High
Healthcare Occupations (mixed)*	Takita et al., 2020 ¹⁰⁴	n=175	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	04/20 - 05/20	Japan	4% (1.62-8.07%)	High
Healthcare Occupations (mixed)*	Tong et al., 2020 ¹⁰⁵	n=191	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	05/12 - 05/15	China	0%	High

Healthcare Occupations (mixed)*	Trieu et al., 2020 ¹⁰⁶	n=607	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Prospective cohort	03/06 - 04/09	Norway	5.27%	High
Healthcare Occupations (mixed)*	Tu et al., 2020 ¹⁰⁷	n=325	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross sectional study with prospective cohort follow up of a subset of the sample	03/19 - 03/20	China	43.08%	High
Healthcare Occupations (mixed)*	Valdivia et al., 2020 ¹⁰⁸	n=1153	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	04/13 - 04/30	Spain	3.5%	High
Healthcare Occupations (mixed)*	Vasquez et al., 2020 ¹⁰⁹	n=1147	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	05/19 - 06/06	Peru	58.3%	High
Healthcare Occupations (mixed)*	Viegas et al., 2020 ¹¹⁰	n=1443	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	08/03 - 08/21	Mozambique	2.63%	High
Healthcare Occupations (mixed)*	Vlachoyiannopoulou et al., 2020 ¹¹¹	n=321	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	04/25 - 05/10	Greece	2.18%	High
Healthcare Occupations (mixed)*	Volta et al., 2020 ¹¹²	n=76	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	04/27 - 04/27	Italy	11.8%	High

Healthcare Occupations (mixed)*	Ward et al., 2020 ¹¹³	n=5416	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	09/15 - 09/28	The United Kingdom	10.67%	Moderate
Healthcare Occupations (mixed)*	Ward et al., 2020 ¹¹³	n=1692	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	09/15 - 09/28	The United Kingdom	6.68%	Moderate
Healthcare Occupations (mixed)*	Xiong et al., 2020 ¹¹⁴	n=797	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	02/12 - 03/17	China	4.39%	Unclear
Healthcare Occupations (mixed)*	Zhang et al., 2020 ¹¹⁵	n=63	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	01/21 - 02/16	China	0%	High
Healthcare Occupations (mixed)*	Zhao et al., 2020 ¹¹⁶	n=1060	Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations*	Cross-sectional survey	01/14 - 02/21	China	8.3%	High
First responders (mixed)*	Ahmad et al., 2020 ¹¹⁷	n=40	Healthcare Practitioners and Technical Occupations and Protective Service Occupations (i.e. first responders)*	Cross-sectional survey	04/21 - 05/22	United States of America	20%	High
First responders (mixed)*	Halbrook et al., 2020 ¹¹⁸	n=679	Healthcare Practitioners and Technical Occupations and Protective Service Occupations (i.e. first responders)*	Cross-sectional survey	05/19 - 08/31	United States of America	8.1%	Moderate

1 2 3 4 5 6 7 8 9	First responders (mixed)*	Iwuji et al., 2020 ¹¹⁹	n=683	Healthcare Practitioners and Technical Occupations and Protective Service Occupations (i.e. first responders)*	Cross-sectional survey	05/12 - 05/13	United States of America	0.7%	High
10 11 12 13 14 15	First responders (mixed)*	Magyar et al., 2020 ¹²⁰	n=70	Healthcare Practitioners and Technical Occupations and Protective Service Occupations (i.e. first responders)*	Cross-sectional survey	05/01 - 05/14	United States of America	4.29%	High
16 17 18 19 20 21	First responders (mixed)*	Martinez et al., 2020 ¹²¹	n=79	Healthcare Practitioners and Technical Occupations and Protective Service Occupations (i.e. first responders)*	Cross-sectional survey	04/16 - 04/17	United States of America	5.06%	High
22 23 24 25 26 27	First responders (mixed)*	Staletovich et al., 2020 ¹²²	n=359	Healthcare Practitioners and Technical Occupations and Protective Service Occupations (i.e. first responders)*	Cross-sectional survey	05/17 - 05/22	United States of America	0%	Unclear
28 29 30 31 32	Healthcare Practitioners and Technical Occupations (29-0000)	Hibino et al., 2020 ¹²³	n=806	Health Diagnosing and Treating Practitioners	Cross-sectional survey	06/01 - 07/30	Japan	0.74% (0.27-1.61%)	Unclear
33 34 35 36 37	Healthcare Practitioners and Technical Occupations (29-0000)	Jones et al., 2020 ²⁹	n=856	Dentists, General	Cross-sectional survey	01/15 - 06/15	The United Kingdom	7.9%	High
38 39 40 41 42 43 44 45 46 47	Life, Physical, and Social Science	Calcagno et al., 2020 ¹²⁴	n=343	Life, Physical, and Social Science Occupations	Cross-sectional survey	04/17 - 05/20	Italy	6.71%	Moderate

Occupations (19-0000)								
Healthcare Practitioners and Technical Occupations (29-0000)	Goenka et al., 2020 ²⁵	n=49	Dietitians and Nutritionists	Cross-sectional survey	07/12 - 08/23	India	18.37%	Moderate
Healthcare Practitioners and Technical Occupations (29-0000)	Goenka et al., 2020 ²⁶	n=6	Dietitians and Nutritionists	Cross-sectional survey	08/01 - 08/31	India	0%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Akinbami et al., 2020 ⁴⁶	n=321	Pharmacists	Cross-sectional survey	05/18 - 06/13	United States of America	4.4% (2.4-7.2%)	Moderate
Healthcare Practitioners and Technical Occupations (29-0000)	Alharbi et al., 2020 ¹²⁵	n=5	Pharmacists	Cross-sectional survey	04/18 - 06/17	Saudi Arabia	0%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Calcagno et al., 2020 ¹²⁴	n=29	Pharmacists	Cross-sectional survey	04/17 - 05/20	Italy	3.45%	Moderate
Healthcare Practitioners and Technical Occupations (29-0000)	Chau et al., 2020 ¹²⁶	n=17	Pharmacists	Cross-sectional survey	08/23 - 08/30	Viet Nam	0%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Hanrath et al., 2020 ³²	n=189	Pharmacists	Cross-sectional survey	05/29 - 07/06	The United Kingdom	4.76%	High

Healthcare Practitioners and Technical Occupations (29-0000)	Khan et al., 2020 ¹²⁷	n=109	Pharmacists	Cross-sectional survey	06/15 - 06/29	India	0%	Moderate
Healthcare Practitioners and Technical Occupations (29-0000)	Mahomed et al., 2020 ⁸¹	n=404	Pharmacists	Cross-sectional survey	08/31 - 10/12	Mozambique	0.5%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Martin et al., 2020 ²³	n=113	Pharmacists	Cross-sectional survey	05/29 - 07/13	The United Kingdom	0%	Moderate
Healthcare Practitioners and Technical Occupations (29-0000)	Rosser et al., 2020 ³³	n=213	Pharmacists	Cross-sectional survey	04/20 - 05/20	United States of America	1.88%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Costa et al., 2020 ¹²⁸	n=652	Physicians and Surgeons	Cross-sectional survey	05/14 - 05/28	Brazil	5.8%	Moderate
Healthcare Practitioners and Technical Occupations (29-0000)	Mohr et al., 2020 ¹²⁹	n=372	Physicians and Surgeons	Cross-sectional survey	05/13 - 07/08	United States of America	1.61%	Moderate
Healthcare Practitioners and Technical Occupations (29-0000)	Nishida et al., 2020 ⁹⁰	n=63	Physicians and Surgeons	Cross-sectional survey	06/12 - 06/19	Japan	3.2% (0.88-11%)	Moderate
Healthcare Practitioners and	Noor et al., 2020 ¹³⁰	n=157	Physicians and Surgeons	Cross-sectional survey	07/13 - 07/15	Pakistan	17.83%	Moderate

Technical Occupations (29-0000)								
Healthcare Practitioners and Technical Occupations (29-0000)	Singhal et al., 2020 ¹³¹	n=208	Physicians and Surgeons	Cross-sectional survey	06/01 - 06/30	India	12.5%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Morcuende et al., 2020 ⁸⁸	n=23	Anesthesiologists	Cross-sectional survey	03/01 - 04/21	United States of America	13.04%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Morcuende et al., 2020 ⁸⁸	n=3	Obstetricians and Gynecologists	Cross-sectional survey	03/01 - 04/21	United States of America	100%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Urbieto et al., 2020 ¹³²	n=23	Pediatricians, General	Cross-sectional survey	04/14 - 04/16	Spain	4.3%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Iversen et al., 2020 ⁸	n=1944	Psychiatrists	Cross-sectional survey	04/15 - 04/22	Denmark	1.85%	Low
Healthcare Practitioners and Technical Occupations (29-0000)	Leidner et al., 2020 ²²	n=301	Surgeons	Cross sectional study with prospective cohort follow up of a subset of the sample	04/08 - 05/22	United States of America	2.66%	High
Healthcare Practitioners and Technical	Akinbami et al., 2020 ⁴⁶	n=2297	Physicians and Surgeons, All Other	Cross-sectional survey	05/18 - 06/13	United States of America	6.1% (5.1-7.1%)	Moderate

Occupations (29-0000)								
Healthcare Practitioners and Technical Occupations (29-0000)	Alharbi et al., 2020 ¹²⁵	n=18	Physicians and Surgeons, All Other	Cross-sectional survey	04/18 - 06/17	Saudi Arabia	27.78%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Amendola et al., 2020 ⁴⁷	n=214	Physicians and Surgeons, All Other	Cross-sectional survey	04/15 - 04/15	Italy	4.67%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Baracco et al., 2020 ²⁴	n=417	Physicians and Surgeons, All Other	Cross-sectional survey	04/23 - 05/05	Italy	17%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Barallat et al., 2020 ⁵⁰	n=1821	Physicians and Surgeons, All Other	Cross-sectional survey	05/04 - 05/22	Spain	11.81%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Bianchi et al., 2020 ¹³³	n=34	Physicians and Surgeons, All Other	Cross-sectional survey	04/15 - 05/15	Italy	5.88%	Unclear
Healthcare Practitioners and Technical Occupations (29-0000)	Blairon et al., 2020 ⁵²	n=323	Physicians and Surgeons, All Other	Cross-sectional survey	05/25 - 06/19	Belgium	11.8%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Brehm et al., 2020 ⁷	n=275	Physicians and Surgeons, All Other	Cross sectional study with prospective cohort follow up of a	03/20 - 07/17	Germany	3.3%	Moderate

				subset of the sample				
Healthcare Practitioners and Technical Occupations (29-0000)	Brousseau et al., 2020 ¹³⁴	n=432	Physicians and Surgeons, All Other	Cross-sectional survey	07/06 - 09/24	Canada	7.2%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Calcagno et al., 2020 ¹²⁴	n=700	Physicians and Surgeons, All Other	Cross-sectional survey	04/17 - 05/20	Italy	7.86%	Moderate
Healthcare Practitioners and Technical Occupations (29-0000)	Chau et al., 2020 ¹²⁶	n=64	Physicians and Surgeons, All Other	Cross-sectional survey	08/23 - 08/30	Viet Nam	0%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Chen et al., 2020 ¹³⁵	n=17	Physicians and Surgeons, All Other	Cross-sectional survey	02/19 - 02/19	China	41.18%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Erber et al., 2020 ³¹	n=860	Physicians and Surgeons, All Other	Cross-sectional survey	04/14 - 05/29	Germany	1.63%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Favara et al., 2020 ¹³⁶	n=15	Physicians and Surgeons, All Other	Prospective cohort	06/01 - 06/07	The United Kingdom	13.33%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Favara et al., 2020 ¹⁹	n=82	Physicians and Surgeons, All Other	Cross-sectional survey	07/13 - 07/13	The United Kingdom	10.9%	High

Healthcare Practitioners and Technical Occupations (29-0000)	Fujita et al., 2020 ¹³⁷	n=42	Physicians and Surgeons, All Other	Cross-sectional survey	04/10 - 04/20	Japan	4.7%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Galan et al., 2020 ²⁰	n=564	Physicians and Surgeons, All Other	Cross-sectional survey	04/14 - 04/27	Spain	39.36%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Godbout et al., 2020 ¹³⁸	n=490	Physicians and Surgeons, All Other	Cross-sectional survey	07/27 - 10/02	United States of America	1.43%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Goenka et al., 2020 ²⁵	n=255	Physicians and Surgeons, All Other	Cross-sectional survey	07/12 - 08/23	India	3.92%	Moderate
Healthcare Practitioners and Technical Occupations (29-0000)	Goenka et al., 2020 ²⁶	n=29	Physicians and Surgeons, All Other	Cross-sectional survey	08/01 - 08/31	India	20.69%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Hanrath et al., 2020 ³²	n=899	Physicians and Surgeons, All Other	Cross-sectional survey	05/29 - 07/06	The United Kingdom	7.01%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Houlihan et al., 2020 ¹³⁹	n=72	Physicians and Surgeons, All Other	Cross-sectional survey	03/26 - 04/08	The United Kingdom	22%	High
Healthcare Practitioners and	Hunter et al., 2020 ²¹	n=279	Physicians and Surgeons, All Other	Cross-sectional survey	04/29 - 05/08	United States of America	1.08%	High

Technical Occupations (29-0000)								
Healthcare Practitioners and Technical Occupations (29-0000)	Insua et al., 2020 ¹⁴⁰	n=116	Physicians and Surgeons, All Other	Cross-sectional survey	06/08 - 06/09	Argentina	0.9% (0.1-5.5%)	High
Healthcare Practitioners and Technical Occupations (29-0000)	Iversen et al., 2020 ⁸	n=4698	Physicians and Surgeons, All Other	Cross-sectional survey	04/15 - 04/22	Denmark	4.07%	Low
Healthcare Practitioners and Technical Occupations (29-0000)	Iversen et al., 2020 ⁸	n=113	Physicians and Surgeons, All Other	Cross-sectional survey	04/15 - 04/22	Denmark	7.08%	Low
Healthcare Practitioners and Technical Occupations (29-0000)	Jeremias et al., 2020 ⁷⁰	n=79	Physicians and Surgeons, All Other	Cross-sectional survey	03/01 - 04/30	United States of America	11.4%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Kassem et al., 2020 ⁷²	n=30	Physicians and Surgeons, All Other	Cross-sectional survey	06/01 - 06/14	Egypt	6.66%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Kassem et al., 2020 ⁷²	n=30	Physicians and Surgeons, All Other	Cross-sectional survey	06/01 - 06/14	Egypt	3.33%	High
Healthcare Practitioners and Technical	Kassem et al., 2020 ⁷²	n=30	Physicians and Surgeons, All Other	Cross-sectional survey	06/01 - 06/14	Egypt	0%	High

Occupations (29-0000)								
Healthcare Practitioners and Technical Occupations (29-0000)	Kassem et al., 2020 ⁷²	n=30	Physicians and Surgeons, All Other	Cross-sectional survey	06/01 - 06/14	Egypt	3.33%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Khan et al., 2020 ¹²⁷	n=980	Physicians and Surgeons, All Other	Cross-sectional survey	06/15 - 06/29	India	2.8% (1.9-4%)	Moderate
Healthcare Practitioners and Technical Occupations (29-0000)	Kohler et al., 2020 ¹⁴¹	n=268	Physicians and Surgeons, All Other	Cross-sectional survey	03/19 - 04/03	Switzerland	1.49%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Kumar et al., 2020 ¹⁴²	n=201	Physicians and Surgeons, All Other	Cross-sectional survey	06/01 - 06/30	India	7% (4.2-11.4%)	High
Healthcare Practitioners and Technical Occupations (29-0000)	Leidner et al., 2020 ²²	n=1081	Physicians and Surgeons, All Other	Cross sectional study with prospective cohort follow up of a subset of the sample	04/08 - 05/22	United States of America	3.33%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Lumley et al., 2020 ⁹	n=1859	Physicians and Surgeons, All Other	Prospective cohort	04/23 - 11/30	The United Kingdom	10.11%	Moderate
Healthcare Practitioners and Technical	Martin et al., 2020 ²³	n=1243	Physicians and Surgeons, All Other	Cross-sectional survey	05/29 - 07/13	The United Kingdom	10.3%	Moderate

Occupations (29-0000)								
Healthcare Practitioners and Technical Occupations (29-0000)	Mesnil et al., 2020 ¹⁴³	n=111	Physicians and Surgeons, All Other	Cross-sectional survey	06/08 - 06/22	France	11%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Missaglia et al., 2020 ¹⁴⁴	n=377	Physicians and Surgeons, All Other	Cross-sectional survey	04/01 - 04/30	Italy	14.9%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Mohr et al., 2020 ¹²⁹	n=272	Physicians and Surgeons, All Other	Cross-sectional survey	05/13 - 07/08	United States of America	2.94%	Moderate
Healthcare Practitioners and Technical Occupations (29-0000)	Moscola et al., 2020 ⁸⁹	n=3746	Physicians and Surgeons, All Other	Cross-sectional survey	04/20 - 06/23	United States of America	8.7%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Nishida et al., 2020 ⁹⁰	n=149	Physicians and Surgeons, All Other	Cross-sectional survey	06/12 - 06/19	Japan	1.3% (0.37-4.8%)	Moderate
Healthcare Practitioners and Technical Occupations (29-0000)	Nishida et al., 2020 ⁹⁰	n=46	Physicians and Surgeons, All Other	Cross-sectional survey	06/12 - 06/19	Japan	0%	Moderate
Healthcare Practitioners and Technical Occupations (29-0000)	Nishida et al., 2020 ⁹⁰	n=40	Physicians and Surgeons, All Other	Cross-sectional survey	06/12 - 06/19	Japan	0%	Moderate

Healthcare Practitioners and Technical Occupations (29-0000)	Nishida et al., 2020 ⁹⁰	n=59	Physicians and Surgeons, All Other	Cross-sectional survey	06/12 - 06/19	Japan	1.7% (0.3-9%)	Moderate
Healthcare Practitioners and Technical Occupations (29-0000)	Nishida et al., 2020 ⁹⁰	n=925	Physicians and Surgeons, All Other	Cross-sectional survey	06/12 - 06/19	Japan	0.43% (0.17-1.1%)	Moderate
Healthcare Practitioners and Technical Occupations (29-0000)	Noor et al., 2020 ¹³⁰	n=303	Physicians and Surgeons, All Other	Cross-sectional survey	07/13 - 07/15	Pakistan	19.8%	Moderate
Healthcare Practitioners and Technical Occupations (29-0000)	Orth-Holler et al., 2020 ¹⁴⁵	n=377	Physicians and Surgeons, All Other	Cross-sectional survey	03/20 - 03/27	Austria	0.3% (0.01-1.5%)	High
Healthcare Practitioners and Technical Occupations (29-0000)	Plebani et al., 2020 ¹⁴⁶	n=2337	Physicians and Surgeons, All Other	Cross-sectional survey	02/22 - 05/29	Italy	3.6% (2.8-4.4%)	High
Healthcare Practitioners and Technical Occupations (29-0000)	Rosser et al., 2020 ³³	n=2533	Physicians and Surgeons, All Other	Cross-sectional survey	04/20 - 05/20	United States of America	1.07%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Rudberg et al., 2020 ¹⁴⁷	n=439	Physicians and Surgeons, All Other	Cross-sectional survey	04/14 - 05/08	Sweden	19.1%	Moderate
Healthcare Practitioners and	Schmidt et al., 2020 ¹⁴⁸	n=34	Physicians and Surgeons, All Other	Cross-sectional survey	04/20 - 04/30	Germany	8.82%	High

Technical Occupations (29-0000)								
Healthcare Practitioners and Technical Occupations (29-0000)	Sotgiu et al., 2020 ¹⁴⁹	n=115	Physicians and Surgeons, All Other	Cross-sectional survey	04/02 - 04/16	Italy	6.09%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Venugopal et al., 2020 ¹⁵⁰	n=157	Physicians and Surgeons, All Other	Cross-sectional survey	03/01 - 05/01	United States of America	25%	Moderate
Healthcare Practitioners and Technical Occupations (29-0000)	Yogo et al., 2020 ³⁶	n=110	Physicians and Surgeons, All Other	Cross-sectional survey	05/20 - 06/08	United States of America	1.82%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Brzostek et al., 2020 ¹⁵¹	n=998	Physician Assistants	Cross-sectional survey	04/17 - 05/07	United States of America	28.3%	Moderate
Healthcare Practitioners and Technical Occupations (29-0000)	Hoffmann et al., 2020 ¹⁵²	n=156	Physician Assistants	Prospective cohort	07/01 - 07/31	Germany	1.3%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Mohr et al., 2020 ¹²⁹	n=156	Physician Assistants	Cross-sectional survey	05/13 - 07/08	United States of America	0.64%	Moderate
Healthcare Practitioners and Technical	Morcuende et al., 2020 ⁸⁸	n=6	Physician Assistants	Cross-sectional survey	03/01 - 04/21	United States of America	9.43%	High

Occupations (29-0000)								
Healthcare Practitioners and Technical Occupations (29-0000)	Morcuende et al., 2020 ⁸⁸	n=53	Physician Assistants	Cross-sectional survey	03/01 - 04/21	United States of America	9.43%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Patel et al., 2020 ¹⁵³	n=230	Physician Assistants	Prospective cohort	06/02 - 06/27	United States of America	3.48%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Self et al., 2020 ¹⁵⁴	n=919	Physician Assistants	Cross-sectional survey	04/03 - 06/19	United States of America	5.66%	Moderate
Healthcare Practitioners and Technical Occupations (29-0000)	Shah et al., 2020 ¹⁵⁵	n=248	Physician Assistants	Cross-sectional survey	05/25 - 07/09	United States of America	0%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Shah et al., 2020 ¹⁵⁵	n=320	Physician Assistants	Cross-sectional survey	05/25 - 07/09	United States of America	0.63%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Lumley et al., 2020 ⁹	n=386	Occupational Therapists	Prospective cohort	04/23 - 11/30	The United Kingdom	11.4%	Moderate
Healthcare Practitioners and Technical Occupations (29-0000)	Akinbami et al., 2020 ⁴⁶	n=235	Physical Therapists	Cross-sectional survey	05/18 - 06/13	United States of America	10.6% (7-15.3%)	Moderate

Healthcare Practitioners and Technical Occupations (29-0000)	Brehm et al., 2020 ⁷	n=15	Physical Therapists	Cross sectional study with prospective cohort follow up of a subset of the sample	03/20 - 07/17	Germany	0%	Moderate
Healthcare Practitioners and Technical Occupations (29-0000)	Cooper et al., 2020 ⁵⁹	n=84	Physical Therapists	Cross-sectional survey	06/10 - 08/07	The United Kingdom	10.71%	Moderate
Healthcare Practitioners and Technical Occupations (29-0000)	Costa et al., 2020 ¹²⁸	n=159	Physical Therapists	Cross-sectional survey	05/14 - 05/28	Brazil	10.7%	Moderate
Healthcare Practitioners and Technical Occupations (29-0000)	Akinbami et al., 2020 ⁴⁶	n=409	Respiratory Therapists	Cross-sectional survey	05/18 - 06/13	United States of America	8.3% (5.8-11.4%)	Moderate
Healthcare Practitioners and Technical Occupations (29-0000)	Brunner et al., 2020 ⁵⁴	n=42	Respiratory Therapists	Cross-sectional survey	05/04 - 05/29	United States of America	0%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Godbout et al., 2020 ¹³⁸	n=25	Respiratory Therapists	Cross-sectional survey	07/27 - 10/02	United States of America	0%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Hunter et al., 2020 ²¹	n=94	Respiratory Therapists	Cross-sectional survey	04/29 - 05/08	United States of America	0%	High

Healthcare Practitioners and Technical Occupations (29-0000)	Rosser et al., 2020 ³³	n=135	Respiratory Therapists	Cross-sectional survey	04/20 - 05/20	United States of America	0%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Self et al., 2020 ¹⁵⁴	n=235	Respiratory Therapists	Cross-sectional survey	04/03 - 06/19	United States of America	4.26%	Moderate
Healthcare Practitioners and Technical Occupations (29-0000)	Yogo et al., 2020 ³⁶	n=121	Respiratory Therapists	Cross-sectional survey	05/20 - 06/08	United States of America	0%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Rosser et al., 2020 ³³	n=253	Therapists, All Other	Cross-sectional survey	04/20 - 05/20	United States of America	1.58%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Schmidt et al., 2020 ¹⁴⁸	n=80	Therapists, All Other	Cross-sectional survey	04/20 - 04/30	Germany	3.75%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Yogo et al., 2020 ³⁶	n=22	Therapists, All Other	Cross-sectional survey	05/20 - 06/08	United States of America	4.55%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Calcagno et al., 2020 ¹²⁴	n=13	Veterinarians	Cross-sectional survey	04/17 - 05/20	Italy	0%	Moderate
Healthcare Practitioners and	Akinbami et al., 2020 ⁴⁶	n=6426	Registered Nurses	Cross-sectional survey	05/18 - 06/13	United States of America	7.7% (7.1-8.4%)	Moderate

Technical Occupations (29-0000)								
Healthcare Practitioners and Technical Occupations (29-0000)	Alharbi et al., 2020 ¹²⁵	n=70	Registered Nurses	Cross-sectional survey	04/18 - 06/17	Saudi Arabia	10%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Alharbi et al., 2020 ¹²⁵	n=9	Registered Nurses	Cross-sectional survey	04/18 - 06/17	Saudi Arabia	33.33%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Alharbi et al., 2020 ¹²⁵	n=76	Registered Nurses	Cross-sectional survey	04/18 - 06/17	Saudi Arabia	26.32%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Alharbi et al., 2020 ¹²⁵	n=21	Registered Nurses	Cross-sectional survey	04/18 - 06/17	Saudi Arabia	14.29%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Alharbi et al., 2020 ¹²⁵	n=43	Registered Nurses	Cross-sectional survey	04/18 - 06/17	Saudi Arabia	27.91%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Amendola et al., 2020 ⁴⁷	n=216	Registered Nurses	Cross-sectional survey	04/15 - 04/15	Italy	6.02%	High
Healthcare Practitioners and Technical	Bampoe et al., 2020 ¹⁵⁶	n=52	Registered Nurses	Cross-sectional survey	05/11 - 06/05	The United Kingdom	13.5% (5.6-25.8%)	High

Occupations (29-0000)								
Healthcare Practitioners and Technical Occupations (29-0000)	Bampoe et al., 2020 ¹⁵⁶	n=40	Registered Nurses	Cross-sectional survey	05/11 - 06/05	The United Kingdom	12.5% (4.2-26.8%)	High
Healthcare Practitioners and Technical Occupations (29-0000)	Baracco et al., 2020 ²⁴	n=1014	Registered Nurses	Cross-sectional survey	04/23 - 05/05	Italy	17.9%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Barallat et al., 2020 ⁵⁰	n=2243	Registered Nurses	Cross-sectional survey	05/04 - 05/22	Spain	10.64%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Brehm et al., 2020 ⁷	n=444	Registered Nurses	Cross sectional study with prospective cohort follow up of a subset of the sample	03/20 - 07/17	Germany	2.3%	Moderate
Healthcare Practitioners and Technical Occupations (29-0000)	Brousseau et al., 2020 ¹³⁴	n=1189	Registered Nurses	Cross-sectional survey	07/06 - 09/24	Canada	11.9%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Calcagno et al., 2020 ¹²⁴	n=1833	Registered Nurses	Cross-sectional survey	04/17 - 05/20	Italy	8.18%	Moderate
Healthcare Practitioners and Technical	Chau et al., 2020 ¹²⁶	n=144	Registered Nurses	Cross-sectional survey	08/23 - 08/30	Viet Nam	0%	High

Occupations (29-0000)								
Healthcare Practitioners and Technical Occupations (29-0000)	Chen et al., 2020 ¹³⁵	n=25	Registered Nurses	Cross-sectional survey	02/19 - 02/19	China	8%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Cooper et al., 2020 ⁵⁹	n=3471	Registered Nurses	Cross-sectional survey	06/10 - 08/07	The United Kingdom	7.52%	Moderate
Healthcare Practitioners and Technical Occupations (29-0000)	Costa et al., 2020 ¹²⁸	n=370	Registered Nurses	Cross-sectional survey	05/14 - 05/28	Brazil	11.4%	Moderate
Healthcare Practitioners and Technical Occupations (29-0000)	Dimcheff et al., 2020 ¹⁵⁷	n=412	Registered Nurses	Cross-sectional survey	06/08 - 07/08	United States of America	7%	Moderate
Healthcare Practitioners and Technical Occupations (29-0000)	Erber et al., 2020 ³¹	n=958	Registered Nurses	Cross-sectional survey	04/14 - 05/29	Germany	2.5%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Favara et al., 2020 ¹³⁶	n=45	Registered Nurses	Prospective cohort	06/01 - 06/07	The United Kingdom	28.89%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Favara et al., 2020 ¹⁹	n=237	Registered Nurses	Cross-sectional survey	07/13 - 07/13	The United Kingdom	16.5%	High

Healthcare Practitioners and Technical Occupations (29-0000)	Finkenzeller et al., 2020 ¹⁵⁸	n=251	Registered Nurses	Prospective cohort	06/29 - 07/29	Germany	12%	Moderate
Healthcare Practitioners and Technical Occupations (29-0000)	Finkenzeller et al., 2020 ¹⁵⁸	n=887	Registered Nurses	Prospective cohort	06/29 - 07/29	Germany	20%	Moderate
Healthcare Practitioners and Technical Occupations (29-0000)	Fujita et al., 2020 ¹³⁷	n=50	Registered Nurses	Cross-sectional survey	04/10 - 04/20	Japan	6%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Galan et al., 2020 ²⁰	n=687	Registered Nurses	Cross-sectional survey	04/14 - 04/27	Spain	30.71%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Godbout et al., 2020 ¹³⁸	n=937	Registered Nurses	Cross-sectional survey	07/27 - 10/02	United States of America	1.39%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Goenka et al., 2020 ²⁵	n=224	Registered Nurses	Cross-sectional survey	07/12 - 08/23	India	9.38%	Moderate
Healthcare Practitioners and Technical Occupations (29-0000)	Goenka et al., 2020 ²⁶	n=43	Registered Nurses	Cross-sectional survey	08/01 - 08/31	India	34.88%	High
Healthcare Practitioners and	Grant et al., 2020 ¹⁵⁹	n=1345	Registered Nurses	Cross-sectional survey	05/15 - 06/05	The United Kingdom	34.7%	High

Technical Occupations (29-0000)								
Healthcare Practitioners and Technical Occupations (29-0000)	Grant et al., 2020 ¹⁵⁹	n=108	Registered Nurses	Cross-sectional survey	05/15 - 06/05	The United Kingdom	25%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Hanrath et al., 2020 ³²	n=749	Registered Nurses	Cross-sectional survey	05/29 - 07/06	The United Kingdom	8.99%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Haq et al., 2020 ⁶⁷	n=209	Registered Nurses	Cross-sectional survey	06/15 - 06/29	Pakistan	38.8% (32.1-45.7%)	Moderate
Healthcare Practitioners and Technical Occupations (29-0000)	Houlihan et al., 2020 ¹³⁹	n=106	Registered Nurses	Cross-sectional survey	03/26 - 04/08	The United Kingdom	24%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Houlihan et al., 2020 ¹³⁹	n=22	Registered Nurses	Cross-sectional survey	03/26 - 04/08	The United Kingdom	23%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Hunter et al., 2020 ²¹	n=317	Registered Nurses	Cross-sectional survey	04/29 - 05/08	United States of America	2.2%	High
Healthcare Practitioners and Technical	Iversen et al., 2020 ⁸	n=9963	Registered Nurses	Cross-sectional survey	04/15 - 04/22	Denmark	4.03%	Low

Occupations (29-0000)								
Healthcare Practitioners and Technical Occupations (29-0000)	Iversen et al., 2020 ⁸	n=1786	Registered Nurses	Cross-sectional survey	04/15 - 04/22	Denmark	4.65%	Low
Healthcare Practitioners and Technical Occupations (29-0000)	Jeremias et al., 2020 ⁷⁰	n=1043	Registered Nurses	Cross-sectional survey	03/01 - 04/30	United States of America	9.5%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Jones et al., 2020 ²⁹	n=1962	Registered Nurses	Cross-sectional survey	01/15 - 06/15	The United Kingdom	10.5%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Kassem et al., 2020 ⁷²	n=28	Registered Nurses	Cross-sectional survey	06/01 - 06/14	Egypt	10.71%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Kassem et al., 2020 ⁷²	n=28	Registered Nurses	Cross-sectional survey	06/01 - 06/14	Egypt	7.14%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Kassem et al., 2020 ⁷²	n=28	Registered Nurses	Cross-sectional survey	06/01 - 06/14	Egypt	3.57%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Kassem et al., 2020 ⁷²	n=28	Registered Nurses	Cross-sectional survey	06/01 - 06/14	Egypt	0%	High

Healthcare Practitioners and Technical Occupations (29-0000)	Khan et al., 2020 ¹²⁷	n=321	Registered Nurses	Cross-sectional survey	06/15 - 06/29	India	2.8% (1.5-5.3%)	Moderate
Healthcare Practitioners and Technical Occupations (29-0000)	Kohler et al., 2020 ¹⁴¹	n=398	Registered Nurses	Cross-sectional survey	03/19 - 04/03	Switzerland	0.75%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Kumar et al., 2020 ¹⁴²	n=308	Registered Nurses	Cross-sectional survey	06/01 - 06/30	India	6.8% (4.5-10.2%)	High
Healthcare Practitioners and Technical Occupations (29-0000)	Leidner et al., 2020 ²²	n=110	Registered Nurses	Cross sectional study with prospective cohort follow up of a subset of the sample	04/08 - 05/22	United States of America	0%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Leidner et al., 2020 ²²	n=3504	Registered Nurses	Cross sectional study with prospective cohort follow up of a subset of the sample	04/08 - 05/22	United States of America	2.34%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Lumley et al., 2020 ⁹	n=4528	Registered Nurses	Prospective cohort	04/23 - 11/30	The United Kingdom	13.21%	Moderate
Healthcare Practitioners and Technical Occupations (29-0000)	Mansour et al., 2020 ¹⁶⁰	n=285	Registered Nurses	Cross-sectional survey	03/24 - 04/04	United States of America	32.63%	High

1 2 3 4 5 6 7	Healthcare Practitioners and Technical Occupations (29-0000)	Martin et al., 2020 ¹⁶¹	n=580	Registered Nurses	Cross-sectional survey	04/01 - 04/15	Spain	5.52%	High
8 9 10 11 12	Healthcare Practitioners and Technical Occupations (29-0000)	Martin et al., 2020 ¹⁶¹	n=74	Registered Nurses	Cross-sectional survey	04/01 - 04/15	Spain	9.46%	High
13 14 15 16 17 18	Healthcare Practitioners and Technical Occupations (29-0000)	Martin et al., 2020 ¹⁶¹	n=676	Registered Nurses	Cross-sectional survey	04/01 - 04/15	Spain	5.92%	High
19 20 21 22 23	Healthcare Practitioners and Technical Occupations (29-0000)	Martin et al., 2020 ¹⁶¹	n=337	Registered Nurses	Cross-sectional survey	04/01 - 04/15	Spain	5.93%	High
24 25 26 27 28	Healthcare Practitioners and Technical Occupations (29-0000)	Martin et al., 2020 ¹⁶¹	n=339	Registered Nurses	Cross-sectional survey	04/01 - 04/15	Spain	5.9%	High
29 30 31 32 33	Healthcare Practitioners and Technical Occupations (29-0000)	Meissner et al., 2020 ¹⁶²	n=439	Registered Nurses	Cross-sectional survey	04/14 - 05/06	United States of America	1.37%	High
34 35 36 37 38	Healthcare Practitioners and Technical Occupations (29-0000)	Mohr et al., 2020 ¹²⁹	n=410	Registered Nurses	Cross-sectional survey	05/13 - 07/08	United States of America	1.46%	Moderate
39 40 41 42 43 44 45 46 47	Healthcare Practitioners and	Moscola et al., 2020 ⁸⁹	n=11468	Registered Nurses	Cross-sectional survey	04/20 - 06/23	United States of America	13.1%	High

Technical Occupations (29-0000)								
Healthcare Practitioners and Technical Occupations (29-0000)	Mostafa et al., 2020 ¹⁶³	n=4040	Registered Nurses	Cross-sectional survey	04/22 - 05/14	Egypt	1.31%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Nishida et al., 2020 ⁹⁰	n=489	Registered Nurses	Cross-sectional survey	06/12 - 06/19	Japan	0.2% (0.04-1.1%)	Moderate
Healthcare Practitioners and Technical Occupations (29-0000)	Noor et al., 2020 ¹³⁰	n=460	Registered Nurses	Cross-sectional survey	07/13 - 07/15	Pakistan	39.78%	Moderate
Healthcare Practitioners and Technical Occupations (29-0000)	Paradiso et al., 2020 ¹⁶⁴	n=606	Registered Nurses	Cross sectional study with prospective cohort follow up of a subset of the sample	03/26 - 04/17	Italy	0.33%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Plebani et al., 2020 ¹⁴⁶	n=3230	Registered Nurses	Cross-sectional survey	02/22 - 05/29	Italy	4.7% (4-5.5%)	High
Healthcare Practitioners and Technical Occupations (29-0000)	Poustchi et al., 2020 ²⁸	n=1245	Registered Nurses	Cross-sectional survey	04/17 - 06/02	Iran (Islamic Republic of)	15.9% (13.9-18%)	Moderate
Healthcare Practitioners and Technical	Rudberg et al., 2020 ¹⁴⁷	n=636	Registered Nurses	Cross-sectional survey	04/14 - 05/08	Sweden	21.9%	Moderate

Occupations (29-0000)								
Healthcare Practitioners and Technical Occupations (29-0000)	Schmidt et al., 2020 ¹⁴⁸	n=154	Registered Nurses	Cross-sectional survey	04/20 - 04/30	Germany	0%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Self et al., 2020 ¹⁵⁴	n=1445	Registered Nurses	Cross-sectional survey	04/03 - 06/19	United States of America	5.05%	Moderate
Healthcare Practitioners and Technical Occupations (29-0000)	Siddiqui et al., 2020 ²	n=59	Registered Nurses	Prospective cohort	04/15 - 08/15	India	10.2%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Siddiqui et al., 2020 ²	n=70	Registered Nurses	Prospective cohort	04/15 - 08/15	India	10%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Sotgiu et al., 2020 ¹⁴⁹	n=64	Registered Nurses	Cross-sectional survey	04/02 - 04/16	Italy	7.8% (1.2-14.4%)	High
Healthcare Practitioners and Technical Occupations (29-0000)	Sydney et al., 2020 ¹⁶⁵	n=81	Registered Nurses	Cross-sectional survey	04/28 - 05/04	United States of America	18.52%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Urbietta et al., 2020 ¹³²	n=83	Registered Nurses	Cross-sectional survey	04/14 - 04/16	Spain	4.8%	High

Healthcare Practitioners and Technical Occupations (29-0000)	Urbietta et al., 2020 ¹³²	n=23	Registered Nurses	Cross-sectional survey	04/14 - 04/16	Spain	8.7%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Venugopal et al., 2020 ¹⁵⁰	n=142	Registered Nurses	Cross-sectional survey	03/01 - 05/01	United States of America	28%	Moderate
Healthcare Practitioners and Technical Occupations (29-0000)	Yogo et al., 2020 ³⁶	n=1129	Registered Nurses	Cross-sectional survey	05/20 - 06/08	United States of America	2.48%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Yogo et al., 2020 ³⁶	n=12	Registered Nurses	Cross-sectional survey	05/20 - 06/08	United States of America	0%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Zhou et al., 2020 ¹⁶⁶	n=2406	Registered Nurses	Cross-sectional survey	03/16 - 03/25	China	1.37%	Moderate
Healthcare Practitioners and Technical Occupations (29-0000)	Godbout et al., 2020 ¹³⁸	n=141	Nurse Practitioners	Cross-sectional survey	07/27 - 10/02	United States of America	1.42%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Dimcheff et al., 2020 ¹⁵⁷	n=214	Nurse Practitioners	Cross-sectional survey	06/08 - 07/08	United States of America	3.7%	Moderate
Healthcare Practitioners and	Akinbami et al., 2020 ⁴⁶	n=719	Health Technologists and Technicians	Cross-sectional survey	05/18 - 06/13	United States of America	4.2% (2.8-5.9%)	Moderate

Technical Occupations (29-0000)								
Healthcare Practitioners and Technical Occupations (29-0000)	Blairon et al., 2020 ⁵²	n=61	Health Technologists and Technicians	Cross-sectional survey	05/25 - 06/19	Belgium	6.6%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Yogo et al., 2020 ³⁶	n=65	Health Technologists and Technicians	Cross-sectional survey	05/20 - 06/08	United States of America	4.62%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Silva et al., 2020 ³⁴	n=224	Clinical Laboratory Technologists and Technicians	Cross-sectional survey	06/05 - 07/31	Brazil	7.59%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Costa et al., 2020 ¹²⁸	n=66	Medical and Clinical Laboratory Technologists	Cross-sectional survey	05/14 - 05/28	Brazil	3%	Moderate
Healthcare Practitioners and Technical Occupations (29-0000)	Akinbami et al., 2020 ⁴⁶	n=293	Medical and Clinical Laboratory Technicians	Cross-sectional survey	05/18 - 06/13	United States of America	3.4% (1.7-6.2%)	Moderate
Healthcare Practitioners and Technical Occupations (29-0000)	Akinbami et al., 2020 ⁴⁶	n=365	Medical and Clinical Laboratory Technicians	Cross-sectional survey	05/18 - 06/13	United States of America	5.5% (3.4-8.3%)	Moderate
Healthcare Practitioners and Technical	Alharbi et al., 2020 ¹²⁵	n=80	Medical and Clinical Laboratory Technicians	Cross-sectional survey	04/18 - 06/17	Saudi Arabia	20%	High

Occupations (29-0000)								
Healthcare Practitioners and Technical Occupations (29-0000)	Baracco et al., 2020 ²⁴	n=256	Medical and Clinical Laboratory Technicians	Cross-sectional survey	04/23 - 05/05	Italy	12.1%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Brehm et al., 2020 ⁷	n=105	Medical and Clinical Laboratory Technicians	Cross sectional study with prospective cohort follow up of a subset of the sample	03/20 - 07/17	Germany	0%	Moderate
Healthcare Practitioners and Technical Occupations (29-0000)	Calcagno et al., 2020 ¹²⁴	n=216	Medical and Clinical Laboratory Technicians	Cross-sectional survey	04/17 - 05/20	Italy	6.94%	Moderate
Healthcare Practitioners and Technical Occupations (29-0000)	Calcagno et al., 2020 ¹²⁴	n=157	Medical and Clinical Laboratory Technicians	Cross-sectional survey	04/17 - 05/20	Italy	11.46%	Moderate
Healthcare Practitioners and Technical Occupations (29-0000)	Chau et al., 2020 ¹²⁶	n=33	Medical and Clinical Laboratory Technicians	Cross-sectional survey	08/23 - 08/30	Viet Nam	0%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Galan et al., 2020 ²⁰	n=192	Medical and Clinical Laboratory Technicians	Cross-sectional survey	04/14 - 04/27	Spain	21.35%	High
Healthcare Practitioners and Technical	Goenka et al., 2020 ²⁵	n=72	Medical and Clinical Laboratory Technicians	Cross-sectional survey	07/12 - 08/23	India	15.28%	Moderate

Occupations (29-0000)								
Healthcare Practitioners and Technical Occupations (29-0000)	Haq et al., 2020 ⁶⁷	n=32	Medical and Clinical Laboratory Technicians	Cross-sectional survey	06/15 - 06/29	Pakistan	50% (31.8-68.1%)	Moderate
Healthcare Practitioners and Technical Occupations (29-0000)	Iversen et al., 2020 ⁸	n=1292	Medical and Clinical Laboratory Technicians	Cross-sectional survey	04/15 - 04/22	Denmark	1.93%	Low
Healthcare Practitioners and Technical Occupations (29-0000)	Khan et al., 2020 ¹²⁷	n=397	Medical and Clinical Laboratory Technicians	Cross-sectional survey	06/15 - 06/29	India	2.5% (1.4-4.6%)	Moderate
Healthcare Practitioners and Technical Occupations (29-0000)	Lumley et al., 2020 ⁹	n=452	Medical and Clinical Laboratory Technicians	Prospective cohort	04/23 - 11/30	The United Kingdom	8.63%	Moderate
Healthcare Practitioners and Technical Occupations (29-0000)	Nishida et al., 2020 ⁹⁰	n=140	Medical and Clinical Laboratory Technicians	Cross-sectional survey	06/12 - 06/19	Japan	0%	Moderate
Healthcare Practitioners and Technical Occupations (29-0000)	Rosser et al., 2020 ³³	n=225	Medical and Clinical Laboratory Technicians	Cross-sectional survey	04/20 - 05/20	United States of America	0.44%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Iversen et al., 2020 ⁸	n=342	Radiologic Technologists	Cross-sectional survey	04/15 - 04/22	Denmark	3.51%	Low

Healthcare Practitioners and Technical Occupations (29-0000)	Martin et al., 2020 ²³	n=241	Radiologic Technologists	Cross-sectional survey	05/29 - 07/13	The United Kingdom	9.96%	Moderate
Healthcare Practitioners and Technical Occupations (29-0000)	Akinbami et al., 2020 ⁴⁶	n=1158	Emergency Medical Technicians and Paramedics	Cross-sectional survey	05/18 - 06/13	United States of America	5.2% (4-6.6%)	Moderate
Healthcare Practitioners and Technical Occupations (29-0000)	Buntinx et al., 2020 ¹⁶⁷	n=10	Emergency Medical Technicians and Paramedics	Cross-sectional survey	04/14 - 04/16	Belgium	10%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Haq et al., 2020 ⁶⁷	n=157	Emergency Medical Technicians and Paramedics	Cross-sectional survey	06/15 - 06/29	Pakistan	42% (34.2-50.1%)	Moderate
Healthcare Practitioners and Technical Occupations (29-0000)	Iversen et al., 2020 ⁸	n=323	Emergency Medical Technicians and Paramedics	Cross-sectional survey	04/15 - 04/22	Denmark	4.95%	Low
Healthcare Practitioners and Technical Occupations (29-0000)	Mesnil et al., 2020 ¹⁴³	n=212	Emergency Medical Technicians and Paramedics	Cross-sectional survey	06/08 - 06/22	France	11%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Reuben et al., 2020 ¹⁶⁸	n=10	Emergency Medical Technicians and Paramedics	Cross-sectional survey	05/28 - 07/15	United States of America	0%	High

Healthcare Practitioners and Technical Occupations (29-0000)	Saberian et al., 2020 ¹⁶⁹	n=243	Emergency Medical Technicians and Paramedics	Cross-sectional survey	03/20 - 05/20	Iran (Islamic Republic of)	41.56%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Self et al., 2020 ¹⁵⁴	n=56	Emergency Medical Technicians and Paramedics	Cross-sectional survey	04/03 - 06/19	United States of America	5.36%	Moderate
Healthcare Practitioners and Technical Occupations (29-0000)	Tarabichi et al., 2020 ¹⁷⁰	n=111	Emergency Medical Technicians and Paramedics	Cross-sectional survey	04/20 - 05/19	United States of America	5.41%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Baracco et al., 2020 ²⁴	n=188	Health Technologists and Technicians, All Other	Cross-sectional survey	04/23 - 05/05	Italy	13.8%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Chau et al., 2020 ¹²⁶	n=22	Health Technologists and Technicians, All Other	Cross-sectional survey	08/23 - 08/30	Viet Nam	0%	High
Healthcare Practitioners and Technical Occupations (29-0000)	Goenka et al., 2020 ²⁵	n=99	Health Technologists and Technicians, All Other	Cross-sectional survey	07/12 - 08/23	India	12.12%	Moderate
Healthcare Practitioners and Technical Occupations (29-0000)	Goenka et al., 2020 ²⁶	n=16	Health Technologists and Technicians, All Other	Cross-sectional survey	08/01 - 08/31	India	68.75%	High
Healthcare Support	Jeremias et al., 2020 ⁷⁰	n=155	Healthcare Support Occupations	Cross-sectional survey	03/01 - 04/30	United States of America	5.8%	High

Occupations (31-0000)								
Healthcare Support Occupations (31-0000)	Ward et al., 2020 ¹¹³	n=979	Nursing, Psychiatric, and Home Health Aides	Cross-sectional survey	09/15 - 09/28	The United Kingdom	11.09% (8.96-13.59%)	Moderate
Healthcare Support Occupations (31-0000)	Ward et al., 2020 ¹¹³	n=257	Nursing, Psychiatric, and Home Health Aides	Cross-sectional survey	09/15 - 09/28	The United Kingdom	8.95%	Moderate
Healthcare Support Occupations (31-0000)	Vijh et al., 2020 ¹⁷¹	n=169	Nursing, Psychiatric, and Home Health Aides	Cross-sectional survey	05/04 - 05/14	Canada	26.63%	High
Healthcare Support Occupations (31-0000)	Akinbami et al., 2020 ⁴⁶	n=641	Nursing Assistants	Cross-sectional survey	05/18 - 06/13	United States of America	12.8% (10.3-15.6%)	Moderate
Healthcare Support Occupations (31-0000)	Bampoe et al., 2020 ¹⁵⁶	n=108	Nursing Assistants	Cross-sectional survey	05/11 - 06/05	The United Kingdom	15.7% (9.5-24%)	High
Healthcare Support Occupations (31-0000)	Baracco et al., 2020 ²⁴	n=257	Nursing Assistants	Cross-sectional survey	04/23 - 05/05	Italy	22.2%	High
Healthcare Support Occupations (31-0000)	Barallat et al., 2020 ⁵⁰	n=832	Nursing Assistants	Cross-sectional survey	05/04 - 05/22	Spain	13.94%	High
Healthcare Support Occupations (31-0000)	Bhattacharya et al., 2020 ¹⁷²	n=121	Nursing Assistants	Cross-sectional survey	06/01 - 06/15	United States of America	1.65%	High
Healthcare Support	Brousseau et al., 2020 ¹³⁴	n=132	Nursing Assistants	Cross-sectional survey	07/06 - 09/24	Canada	16.7%	High

Occupations (31-0000)								
Healthcare Support Occupations (31-0000)	Brunner et al., 2020 ⁵⁴	n=95	Nursing Assistants	Cross-sectional survey	05/04 - 05/29	United States of America	1.05%	High
Healthcare Support Occupations (31-0000)	Brzostek et al., 2020 ¹⁵¹	n=570	Nursing Assistants	Cross-sectional survey	04/17 - 05/07	United States of America	39.5%	Moderate
Healthcare Support Occupations (31-0000)	Brzostek et al., 2020 ¹⁵¹	n=263	Nursing Assistants	Cross-sectional survey	04/17 - 05/07	United States of America	45.6%	Moderate
Healthcare Support Occupations (31-0000)	Calcagno et al., 2020 ¹²⁴	n=476	Nursing Assistants	Cross-sectional survey	04/17 - 05/20	Italy	9.24%	Moderate
Healthcare Support Occupations (31-0000)	Costa et al., 2020 ¹²⁸	n=553	Nursing Assistants	Cross-sectional survey	05/14 - 05/28	Brazil	10.5%	Moderate
Healthcare Support Occupations (31-0000)	Galan et al., 2020 ²⁰	n=472	Nursing Assistants	Cross-sectional survey	04/14 - 04/27	Spain	33.26%	High
Healthcare Support Occupations (31-0000)	Garcia et al., 2020 ¹⁷³	n=2424	Nursing Assistants	Cross-sectional survey	05/01 - 05/30	Spain	22.4%	High
Healthcare Support Occupations (31-0000)	Garcia et al., 2020 ¹⁷⁴	n=2424	Nursing Assistants	Cross-sectional survey	05/01 - 05/30	Spain	22.4%	High
Healthcare Support	Hanrath et al., 2020 ³²	n=1434	Nursing Assistants	Cross-sectional survey	05/29 - 07/06	The United Kingdom	11.44%	High

Occupations (31-0000)								
Healthcare Support Occupations (31-0000)	Iversen et al., 2020 ⁸	n=501	Nursing Assistants	Cross-sectional survey	04/15 - 04/22	Denmark	1.2%	Low
Healthcare Support Occupations (31-0000)	Khan et al., 2020 ¹²⁷	n=624	Nursing Assistants	Cross-sectional survey	06/15 - 06/29	India	2.4% (1.5-4%)	Moderate
Healthcare Support Occupations (31-0000)	Mughal et al., 2020 ¹⁷⁵	n=121	Nursing Assistants	Cross-sectional survey	05/14 - 05/19	United States of America	0.83%	High
Healthcare Support Occupations (31-0000)	Rao et al., 2020 ¹⁷⁶	n=1000	Nursing Assistants	Cross-sectional survey	05/23 - 06/06	India	1%	Unclear
Healthcare Support Occupations (31-0000)	Rudberg et al., 2020 ¹⁴⁷	n=428	Nursing Assistants	Cross-sectional survey	04/14 - 05/08	Sweden	25.5%	Moderate
Healthcare Support Occupations (31-0000)	Siddiqui et al., 2020 ²	n=28	Nursing Assistants	Prospective cohort	04/15 - 08/15	India	10.7%	High
Healthcare Support Occupations (31-0000)	Yogo et al., 2020 ³⁶	n=154	Nursing Assistants	Cross-sectional survey	05/20 - 06/08	United States of America	3.24%	High
Healthcare Support Occupations (31-0000)	Brousseau et al., 2020 ¹³⁴	n=201	Orderlies	Cross-sectional survey	07/06 - 09/24	Canada	17.9%	High
Healthcare Support	Kassem et al., 2020 ⁷²	n=9	Orderlies	Cross-sectional survey	06/01 - 06/14	Egypt	0%	High

Occupations (31-0000)								
Healthcare Support Occupations (31-0000)	Kassem et al., 2020 ⁷²	n=9	Orderlies	Cross-sectional survey	06/01 - 06/14	Egypt	33.33%	High
Healthcare Support Occupations (31-0000)	Kassem et al., 2020 ⁷²	n=9	Orderlies	Cross-sectional survey	06/01 - 06/14	Egypt	11.11%	High
Healthcare Support Occupations (31-0000)	Kassem et al., 2020 ⁷²	n=9	Orderlies	Cross-sectional survey	06/01 - 06/14	Egypt	22.22%	High
Healthcare Support Occupations (31-0000)	Hanrath et al., 2020 ³²	n=122	Orderlies	Cross-sectional survey	05/29 - 07/06	The United Kingdom	9.02%	High
Healthcare Support Occupations (31-0000)	Lumley et al., 2020 ⁹	n=377	Orderlies	Prospective cohort	04/23 - 11/30	The United Kingdom	15.38%	Moderate
Healthcare Support Occupations (31-0000)	Rosser et al., 2020 ³³	n=3959	Medical Assistants	Cross-sectional survey	04/20 - 05/20	United States of America	1.39%	High
Healthcare Support Occupations (31-0000)	Yogo et al., 2020 ³⁶	n=106	Phlebotomists	Cross-sectional survey	05/20 - 06/08	United States of America	0%	High
Healthcare Support Occupations (31-0000)	Cavlek et al., 2020 ⁵⁶	n=300	Healthcare Support Workers, All Other	Cross-sectional survey	04/25 - 05/24	Croatia	0.67%	High
Healthcare Support	Erber et al., 2020 ³¹	n=383	Healthcare Support Workers, All Other	Cross-sectional survey	04/14 - 05/29	Germany	2.34%	High

Occupations (31-0000)								
Healthcare Support Occupations (31-0000)	Khan et al., 2020 ¹²⁷	n=141	Healthcare Support Workers, All Other	Cross-sectional survey	06/15 - 06/29	India	0%	Moderate
Protective Service Occupations (33-0000)	Shukla et al., 2020 ¹⁷⁷	n=1713	Protective Service Occupations	Cross-sectional survey	04/24 - 05/21	United States of America	1.46%	Moderate
Protective Service Occupations (33-0000)	Martinez et al., 2020 ¹²¹	n=18	First-Line Supervisors of Fire Fighting and Prevention Workers	Cross-sectional survey	04/16 - 04/17	United States of America	0%	High
Protective Service Occupations (33-0000)	Martinez et al., 2020 ¹²¹	n=47	First-Line Supervisors of Fire Fighting and Prevention Workers	Cross-sectional survey	04/16 - 04/17	United States of America	14.89%	High
Protective Service Occupations (33-0000)	Martinez et al., 2020 ¹²¹	n=13	First-Line Supervisors of Fire Fighting and Prevention Workers	Cross-sectional survey	04/16 - 04/17	United States of America	7.69%	High
Protective Service Occupations (33-0000)	Akinbami et al., 2020 ⁴⁶	n=330	Firefighters	Cross-sectional survey	05/18 - 06/13	United States of America	6.7% (4.2-9.9%)	Moderate
Protective Service Occupations (33-0000)	Gray et al., 2020 ¹⁷⁸	n=132	Firefighters	Cross-sectional survey	05/01 - 05/31	United States of America	14%	High
Protective Service Occupations (33-0000)	Reuben et al., 2020 ¹⁶⁸	n=62	Firefighters	Cross-sectional survey	05/28 - 07/15	United States of America	4.84%	High
Protective Service Occupations (33-0000)	Sabourin et al., 2020 ³⁵	n=42	Firefighters	Cross-sectional survey	07/15 - 08/15	United States of America	2.38%	High
Protective Service Occupations (33-0000)	Tarabichi et al., 2020 ¹⁷⁰	n=185	Firefighters	Cross-sectional survey	04/20 - 05/19	United States of America	5.41%	High

Protective Service Occupations (33-0000)	Martinez et al., 2020 ¹²¹	n=7	Fire Inspectors and Investigators	Cross-sectional survey	04/16 - 04/17	United States of America	14.29%	High
Protective Service Occupations (33-0000)	Akinbami et al., 2020 ⁴⁶	n=785	Police and Sheriff's Patrol Officers	Cross-sectional survey	05/18 - 06/13	United States of America	4% (2.7-5.6%)	Moderate
Protective Service Occupations (33-0000)	Chughtai et al., 2020 ¹⁷⁹	n=154	Police and Sheriff's Patrol Officers	Cross-sectional survey	05/20 - 05/30	Pakistan	15.6%	High
Protective Service Occupations (33-0000)	Gudo et al., 2020 ⁶⁵	n=564	Police and Sheriff's Patrol Officers	Cross-sectional survey	06/17 - 06/30	Mozambique	6% (4-8%)	High
Protective Service Occupations (33-0000)	Gujski et al., 2020 ¹⁸⁰	n=4026	Police and Sheriff's Patrol Officers	Cross-sectional survey	06/22 - 07/08	Poland	4.2%	Moderate
Protective Service Occupations (33-0000)	Halatoko et al., 2020 ⁴¹	n=196	Police and Sheriff's Patrol Officers	Cross-sectional survey	04/23 - 05/08	Togo	0%	High
Protective Service Occupations (33-0000)	Langa et al., 2020 ¹⁸¹	n=471	Police and Sheriff's Patrol Officers	Cross-sectional survey	09/28 - 10/09	Mozambique	1.5%	High
Protective Service Occupations (33-0000)	Macicame et al., 2020 ¹⁸²	n=456	Police and Sheriff's Patrol Officers	Cross-sectional survey	09/14 - 09/30	Mozambique	4.39%	High
Protective Service Occupations (33-0000)	Mahomed et al., 2020 ⁸¹	n=554	Police and Sheriff's Patrol Officers	Cross-sectional survey	08/31 - 10/12	Mozambique	2.9%	High
Protective Service Occupations (33-0000)	Reuben et al., 2020 ¹⁶⁸	n=220	Police and Sheriff's Patrol Officers	Cross-sectional survey	05/28 - 07/15	United States of America	3.64%	High
Protective Service Occupations (33-0000)	Sabourin et al., 2020 ³⁵	n=125	Police and Sheriff's Patrol Officers	Cross-sectional survey	07/15 - 08/15	United States of America	4%	High

Protective Service Occupations (33-0000)	Shukla et al., 2020 ¹⁷⁷	n=1643	Police and Sheriff's Patrol Officers	Cross-sectional survey	04/24 - 05/21	United States of America	1.52%	Moderate
Protective Service Occupations (33-0000)	Siddiqui et al., 2020 ²	n=27	Police and Sheriff's Patrol Officers	Prospective cohort	04/15 - 08/15	India	7.4%	High
Protective Service Occupations (33-0000)	Viegas et al., 2020 ¹¹⁰	n=559	Police and Sheriff's Patrol Officers	Cross-sectional survey	08/03 - 08/21	Mozambique	3.94%	High
Protective Service Occupations (33-0000)	Denyer et al., 2020 ⁶⁰	n=38216	Security Guards	Cross-sectional survey	05/12 - 05/18	Japan	0.23%	Unclear
Protective Service Occupations (33-0000)	Mahumane et al., 2020 ⁸²	n=407	Security Guards	Cross-sectional survey	11/02 - 11/17	Mozambique	4.9%	High
Protective Service Occupations (33-0000)	Siddiqui et al., 2020 ²	n=9	Security Guards	Prospective cohort	04/15 - 08/15	India	0%	High
Protective Service Occupations (33-0000)	Silva et al., 2020 ³⁴	n=32	Security Guards	Cross-sectional survey	06/05 - 07/31	Brazil	34%	High
Protective Service Occupations (33-0000)	Thani et al., 2020 ¹⁸³	n=61	Security Guards	Cross-sectional survey	07/26 - 09/09	Qatar	60.1%	Moderate
Food Preparation and Serving Related Occupations (35-0000)	Thani et al., 2020 ¹⁸³	n=93	Food Preparation and Serving Related Occupations	Cross-sectional survey	07/26 - 09/09	Qatar	29.2%	Moderate
Food Preparation and Serving Related Occupations (35-0000)	Siddiqui et al., 2020 ²	n=8	Cooks, All Other	Prospective cohort	04/15 - 08/15	India	37.5%	High
Food Preparation and Serving	Brunner et al., 2020 ⁵⁴	n=8	Food Preparation Workers	Cross-sectional survey	05/04 - 05/29	United States of America	0%	High

1	Related Occupations (35-0000)								
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4	Healthcare Support Occupations (31-0000)	Rosser et al., 2020 ³³	n=335	Healthcare Support Occupations	Cross-sectional survey	04/20 - 05/20	United States of America	3.58%	High
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7	Food Preparation and Serving Related Occupations (35-0000)	Biggs et al., 2020 ³	n=24	Food Servers, Nonrestaurant	Cross-sectional survey	04/28 - 05/03	United States of America	4.17%	Moderate
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9									
10									
11	Food Preparation and Serving Related Occupations (35-0000)	Leidner et al., 2020 ²²	n=113	Food Servers, Nonrestaurant	Cross sectional study with prospective cohort follow up of a subset of the sample	04/08 - 05/22	United States of America	1.77%	High
12									
13									
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15									
16	Food Preparation and Serving Related Occupations (35-0000)	Hanrath et al., 2020 ³²	n=340	Other Food Preparation and Serving Related Workers	Cross-sectional survey	05/29 - 07/06	The United Kingdom	8.53%	High
17									
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22	Building and Grounds Cleaning and Maintenance Occupations (37-0000)	Martin et al., 2020 ²³	n=528	Building and Grounds Cleaning and Maintenance Occupations	Cross-sectional survey	05/29 - 07/13	The United Kingdom	8.14%	Moderate
23									
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27	Building and Grounds Cleaning and Maintenance Occupations (37-0000)	Brousseau et al., 2020 ¹³⁴	n=102	Building Cleaning and Pest Control Workers	Cross-sectional survey	07/06 - 09/24	Canada	10.8%	High
28									
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32	Building and Grounds Cleaning and Maintenance Occupations (37-0000)	Chau et al., 2020 ¹²⁶	n=42	Building Cleaning and Pest Control Workers	Cross-sectional survey	08/23 - 08/30	Viet Nam	0%	High
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Occupations (37-0000)								
Building and Grounds Cleaning and Maintenance Occupations (37-0000)	Finkenzeller et al., 2020 ¹⁵⁸	n=57	Building Cleaning and Pest Control Workers	Prospective cohort	06/29 - 07/29	Germany	19.3%	Moderate
Building and Grounds Cleaning and Maintenance Occupations (37-0000)	Chau et al., 2020 ¹²⁶	n=6	Janitors and Cleaners, Except Maids and Housekeeping Cleaners	Cross-sectional survey	08/23 - 08/30	Viet Nam	0%	High
Building and Grounds Cleaning and Maintenance Occupations (37-0000)	Epstude et al., 2020 ¹⁸⁴	n=45	Janitors and Cleaners, Except Maids and Housekeeping Cleaners	Cross-sectional survey	06/15 - 06/30	Germany	0%	High
Building and Grounds Cleaning and Maintenance Occupations (37-0000)	Thani et al., 2020 ¹⁸³	n=105	Janitors and Cleaners, Except Maids and Housekeeping Cleaners	Cross-sectional survey	07/26 - 09/09	Qatar	54.5%	Moderate
Building and Grounds Cleaning and Maintenance Occupations (37-0000)	Brunner et al., 2020 ⁵⁴	n=23	Maids and Housekeeping Cleaners	Cross-sectional survey	05/04 - 05/29	United States of America	0%	High
Building and Grounds Cleaning and Maintenance Occupations (37-0000)	Goenka et al., 2020 ²⁵	n=226	Maids and Housekeeping Cleaners	Cross-sectional survey	07/12 - 08/23	India	26.11%	Moderate
Building and Grounds Cleaning and Maintenance Occupations (37-0000)	Goenka et al., 2020 ²⁶	n=10	Maids and Housekeeping Cleaners	Cross-sectional survey	08/01 - 08/31	India	10%	High

Building and Grounds Cleaning and Maintenance Occupations (37-0000)	Hanrath et al., 2020 ³²	n=515	Maids and Housekeeping Cleaners	Cross-sectional survey	05/29 - 07/06	The United Kingdom	13.2%	High
Building and Grounds Cleaning and Maintenance Occupations (37-0000)	Khan et al., 2020 ¹²⁷	n=276	Maids and Housekeeping Cleaners	Cross-sectional survey	06/15 - 06/29	India	3.3% (1.7-6.2%)	Moderate
Building and Grounds Cleaning and Maintenance Occupations (37-0000)	Leidner et al., 2020 ²²	n=137	Maids and Housekeeping Cleaners	Cross sectional study with prospective cohort follow up of a subset of the sample	04/08 - 05/22	United States of America	8.03%	High
Building and Grounds Cleaning and Maintenance Occupations (37-0000)	Moscola et al., 2020 ⁸⁹	n=7314	Maids and Housekeeping Cleaners	Cross-sectional survey	04/20 - 06/23	United States of America	20.9%	High
Building and Grounds Cleaning and Maintenance Occupations (37-0000)	Shakiba et al., 2020 ¹⁰	n=159	Maids and Housekeeping Cleaners	Cross-sectional survey	04/11 - 04/19	Iran (Islamic Republic of)	25% (13.6-37.5%)	Moderate
Building and Grounds Cleaning and Maintenance Occupations (37-0000)	Shields et al., 2020 ⁹⁷	n=29	Maids and Housekeeping Cleaners	Cross-sectional survey	04/24 - 04/25	The United Kingdom	34.5%	High
Building and Grounds Cleaning and Maintenance Occupations (37-0000)	Siddiqui et al., 2020 ²	n=46	Maids and Housekeeping Cleaners	Prospective cohort	04/15 - 08/15	India	21.7%	High

Personal Care and Service Occupations (39-0000)	Biggs et al., 2020 ³	n=10	Hairdressers, Hairstylists, and Cosmetologists	Cross-sectional survey	04/28 - 05/03	United States of America	10%	Moderate
Personal Care and Service Occupations (39-0000)	Biggs et al., 2020 ³	n=48	Childcare Workers	Cross-sectional survey	04/28 - 05/03	United States of America	0%	Moderate
Personal Care and Service Occupations (39-0000)	Chen et al., 2020 ¹³⁵	n=11	Personal Care Aides	Cross-sectional survey	02/19 - 02/19	China	9.09%	High
Personal Care and Service Occupations (39-0000)	Galan et al., 2020 ²⁰	n=337	Personal Care Aides	Cross-sectional survey	04/14 - 04/27	Spain	27.89%	High
Personal Care and Service Occupations (39-0000)	Galan et al., 2020 ²⁰	n=168	Personal Care Aides	Cross-sectional survey	04/14 - 04/27	Spain	27.38%	High
Personal Care and Service Occupations (39-0000)	Godbout et al., 2020 ¹³⁸	n=86	Personal Care Aides	Cross-sectional survey	07/27 - 10/02	United States of America	2.32%	High
Personal Care and Service Occupations (39-0000)	Hassan et al., 2020 ¹⁸⁵	n=403	Personal Care Aides	Cross-sectional survey	05/11 - 06/17	Sweden	20.1%	High
Personal Care and Service Occupations (39-0000)	Kumar et al., 2020 ¹⁴²	n=292	Personal Care Aides	Cross-sectional survey	06/01 - 06/30	India	18.5% (14.5-23.3%)	High
Personal Care and Service Occupations (39-0000)	Ladhani et al., 2020 ¹⁸⁶	n=208	Personal Care Aides	Prospective cohort	04/10 - 04/13	The United Kingdom	75% (68.7-80.4%)	High

Personal Care and Service Occupations (39-0000)	Lindahl et al., 2020 ¹⁸⁷	n=1005	Personal Care Aides	Cross-sectional survey	04/01 - 04/20	Sweden	22.9% (20.4-25.7%)	High
Personal Care and Service Occupations (39-0000)	Regan et al., 2020 ¹⁸⁸	n=305	Personal Care Aides	Cross-sectional survey	04/15 - 05/06	United States of America	23.6%	Unclear
Personal Care and Service Occupations (39-0000)	Siddiqui et al., 2020 ²	n=5	Personal Care Aides	Prospective cohort	04/15 - 08/15	India	40%	High
Personal Care and Service Occupations (39-0000)	Venugopal et al., 2020 ¹⁵⁰	n=72	Personal Care Aides	Cross-sectional survey	03/01 - 05/01	United States of America	28%	Moderate
Personal Care and Service Occupations (39-0000)	Viegas et al., 2020 ¹¹⁰	n=85	Personal Care Aides	Cross-sectional survey	08/03 - 08/21	Mozambique	1.18%	High
Sales and Related Occupations (41-0000)	Arnaldo et al., 2020 ¹³	n=928	Sales and Related Occupations	Cross-sectional survey	07/06 - 07/13	Mozambique	6.5%	High
Sales and Related Occupations (41-0000)	Arnaldo et al., 2020 ⁴⁸	n=1123	Sales and Related Occupations	Cross-sectional survey	08/10 - 08/21	Mozambique	1.6%	High
Sales and Related Occupations (41-0000)	Langa et al., 2020 ¹⁸¹	n=871	Sales and Related Occupations	Cross-sectional survey	09/28 - 10/09	Mozambique	0.2%	High
Sales and Related Occupations (41-0000)	Mabunda et al., 2020 ¹⁵	n=1585	Sales and Related Occupations	Cross-sectional survey	09/21 - 10/02	Mozambique	8.3%	High
Sales and Related Occupations (41-0000)	Macicame et al., 2020 ¹⁸²	n=1288	Sales and Related Occupations	Cross-sectional survey	09/14 - 09/30	Mozambique	4.97%	High

Sales and Related Occupations (41-0000)	Mahomed et al., 2020 ⁸¹	n=1556	Sales and Related Occupations	Cross-sectional survey	08/31 - 10/12	Mozambique	0.8%	High
Sales and Related Occupations (41-0000)	Mahumane et al., 2020 ⁸²	n=643	Sales and Related Occupations	Cross-sectional survey	11/02 - 11/17	Mozambique	1.9%	High
Sales and Related Occupations (41-0000)	Arnaldo et al., 2020 ¹⁴	n=472	Sales and Related Occupations	Cross-sectional survey	11/16 - 11/21	Mozambique	6.8%	High
Sales and Related Occupations (41-0000)	Arnaldo et al., 2020 ¹⁴	n=460	Sales and Related Occupations	Cross-sectional survey	11/02 - 11/12	Mozambique	5.9%	High
Sales and Related Occupations (41-0000)	Mahomed et al., 2020 ¹⁶	n=517	Sales and Related Occupations	Cross-sectional survey	11/26 - 12/03	Mozambique	8.9%	High
Sales and Related Occupations (41-0000)	Mahomed et al., 2020 ¹⁶	n=1001	Sales and Related Occupations	Cross-sectional survey	11/07 - 11/21	Mozambique	4.5%	High
Sales and Related Occupations (41-0000)	Biggs et al., 2020 ³	n=19	Retail Sales Workers	Cross-sectional survey	04/28 - 05/03	United States of America	0%	Moderate
Sales and Related Occupations (41-0000)	Poustchi et al., 2020 ²⁸	n=753	Cashiers	Cross-sectional survey	04/17 - 06/02	Iran (Islamic Republic of)	16.1% (12.9-19.2%)	Moderate
Sales and Related Occupations (41-0000)	Alali et al., 2020 ¹⁸⁹	n=525	Cashiers	Cross-sectional survey	05/23 - 06/26	Kuwait	38.1% (34-42.3%)	High
Sales and Related Occupations (41-0000)	Denyer et al., 2020 ⁶⁰	n=19075	Retail Salespersons	Cross-sectional survey	05/12 - 05/18	Japan	0.04%	Unclear
Sales and Related Occupations (41-0000)	Kern et al., 2020 ⁷³	n=300	Retail Salespersons	Cross-sectional survey	04/09 - 04/16	Germany	0.33% (0.01-1.84%)	High

Office and Administrative Support Occupations (43-0000)	Rosser et al., 2020 ³³	n=972	Office and Administrative Support Occupations	Cross-sectional survey	04/20 - 05/20	United States of America	1.34%	High
Office and Administrative Support Occupations (43-0000)	Tsitsilonis et al., 2020 ¹²	n=504	Office and Administrative Support Occupations	Cross-sectional survey	06/15 - 07/15	Greece	0.48% (0-2.37%)	Moderate
Office and Administrative Support Occupations (43-0000)	Khan et al., 2020 ⁴⁵	n=37	Hotel, Motel, and Resort Desk Clerks	Cross-sectional survey	07/01 - 07/15	India	10.8% (4.1-25.5%)	Moderate
Office and Administrative Support Occupations (43-0000)	Brunner et al., 2020 ⁵⁴	n=26	Receptionists and Information Clerks	Cross-sectional survey	05/04 - 05/29	United States of America	0%	High
Office and Administrative Support Occupations (43-0000)	Favara et al., 2020 ¹³⁶	n=10	Receptionists and Information Clerks	Prospective cohort	06/01 - 06/07	The United Kingdom	0%	High
Office and Administrative Support Occupations (43-0000)	Moscola et al., 2020 ⁸⁹	n=9645	Receptionists and Information Clerks	Cross-sectional survey	04/20 - 06/23	United States of America	12.6%	High
Office and Administrative Support Occupations (43-0000)	Biggs et al., 2020 ³	n=11	Shipping, Receiving, and Traffic Clerks	Cross-sectional survey	04/28 - 05/03	United States of America	18.18%	Moderate
Office and Administrative	Silva et al., 2020 ³⁴	n=82	Stock Clerks and Order Fillers	Cross-sectional survey	06/05 - 07/31	Brazil	4.88%	High

Support Occupations (43-0000)								
Office and Administrative Support Occupations (43-0000)	Khan et al., 2020 ⁴⁵	n=186	Secretaries and Administrative Assistants	Cross-sectional survey	07/01 - 07/15	India	3.8% (1.8-7.7%)	Moderate
Office and Administrative Support Occupations (43-0000)	Alemu et al., 2020 ⁶	n=48	Executive Secretaries and Executive Administrative Assistants	Cross-sectional survey	04/23 - 04/28	Ethiopia	2.1%	Moderate
Office and Administrative Support Occupations (43-0000)	Barallat et al., 2020 ⁵⁰	n=1181	Executive Secretaries and Executive Administrative Assistants	Cross-sectional survey	05/04 - 05/22	Spain	6.52%	High
Office and Administrative Support Occupations (43-0000)	Lumley et al., 2020 ⁹	n=1557	Executive Secretaries and Executive Administrative Assistants	Prospective cohort	04/23 - 11/30	The United Kingdom	6.74%	Moderate
Office and Administrative Support Occupations (43-0000)	Reuben et al., 2020 ¹⁶⁸	n=18	Executive Secretaries and Executive Administrative Assistants	Cross-sectional survey	05/28 - 07/15	United States of America	0%	High
Office and Administrative Support Occupations (43-0000)	Akinbami et al., 2020 ⁴⁶	n=964	Medical Secretaries	Cross-sectional survey	05/18 - 06/13	United States of America	8% (6.4-9.9%)	Moderate
Office and Administrative Support	Alharbi et al., 2020 ¹²⁵	n=8	Medical Secretaries	Cross-sectional survey	04/18 - 06/17	Saudi Arabia	25%	High

Occupations (43-0000)								
Office and Administrative Support Occupations (43-0000)	Dimcheff et al., 2020 ¹⁵⁷	n=357	Medical Secretaries	Cross-sectional survey	06/08 - 07/08	United States of America	4.2%	Moderate
Office and Administrative Support Occupations (43-0000)	Erber et al., 2020 ³¹	n=557	Medical Secretaries	Cross-sectional survey	04/14 - 05/29	Germany	3.78%	High
Office and Administrative Support Occupations (43-0000)	Finkenzeller et al., 2020 ¹⁵⁸	n=240	Medical Secretaries	Prospective cohort	06/29 - 07/29	Germany	7.1%	Moderate
Office and Administrative Support Occupations (43-0000)	Goenka et al., 2020 ²⁵	n=75	Medical Secretaries	Cross-sectional survey	07/12 - 08/23	India	8%	Moderate
Office and Administrative Support Occupations (43-0000)	Goenka et al., 2020 ²⁵	n=75	Medical Secretaries	Cross-sectional survey	07/12 - 08/23	India	8%	Moderate
Office and Administrative Support Occupations (43-0000)	Iversen et al., 2020 ⁸	n=2631	Medical Secretaries	Cross-sectional survey	04/15 - 04/22	Denmark	2.7%	Low
Office and Administrative Support Occupations (43-0000)	Leidner et al., 2020 ²²	n=793	Medical Secretaries	Cross sectional study with prospective cohort follow up of a	04/08 - 05/22	United States of America	3.15%	High

				subset of the sample				
Office and Administrative Support Occupations (43-0000)	Mesnil et al., 2020 ¹⁴³	n=184	Medical Secretaries	Cross-sectional survey	06/08 - 06/22	France	14.13%	High
Office and Administrative Support Occupations (43-0000)	Nishida et al., 2020 ⁹⁰	n=98	Medical Secretaries	Cross-sectional survey	06/12 - 06/19	Japan	1% (0.18-5.6%)	Moderate
Office and Administrative Support Occupations (43-0000)	Noor et al., 2020 ¹³⁰	n=91	Medical Secretaries	Cross-sectional survey	07/13 - 07/15	Pakistan	43.96%	Moderate
Office and Administrative Support Occupations (43-0000)	Thani et al., 2020 ¹⁸³	n=82	Medical Secretaries	Cross-sectional survey	07/26 - 09/09	Qatar	31.6%	Moderate
Office and Administrative Support Occupations (43-0000)	Zhou et al., 2020 ¹⁶⁶	n=505	Medical Secretaries	Cross-sectional survey	03/16 - 03/25	China	1.39%	Moderate
Office and Administrative Support Occupations (43-0000)	Chau et al., 2020 ¹²⁶	n=20	Data Entry Keyers	Cross-sectional survey	08/23 - 08/30	Viet Nam	0%	High
Office and Administrative Support Occupations (43-0000)	Jones et al., 2020 ²⁹	n=1233	Office Clerks, General	Cross-sectional survey	01/15 - 06/15	The United Kingdom	6.1%	High

Office and Administrative Support Occupations (43-0000)	Rosser et al., 2020 ³³	n=218	Office Clerks, General	Cross-sectional survey	04/20 - 05/20	United States of America	0%	High
Office and Administrative Support Occupations (43-0000)	Satpati et al., 2020 ²⁷	n=47	Office Clerks, General	Cross-sectional survey	07/26 - 08/08	India	4.26%	Moderate
Office and Administrative Support Occupations (43-0000)	Baracco et al., 2020 ²⁴	n=194	Office and Administrative Support Workers, All Other	Cross-sectional survey	04/23 - 05/05	Italy	14.4%	High
Office and Administrative Support Occupations (43-0000)	Brzostek et al., 2020 ¹⁵¹	n=286	Office and Administrative Support Workers, All Other	Cross-sectional survey	04/17 - 05/07	United States of America	45.5%	Moderate
Office and Administrative Support Occupations (43-0000)	Kassem et al., 2020 ⁷²	n=7	Office and Administrative Support Workers, All Other	Cross-sectional survey	06/01 - 06/14	Egypt	14.28%	High
Office and Administrative Support Occupations (43-0000)	Kassem et al., 2020 ⁷²	n=7	Office and Administrative Support Workers, All Other	Cross-sectional survey	06/01 - 06/14	Egypt	0%	High
Office and Administrative Support Occupations (43-0000)	Kassem et al., 2020 ⁷²	n=7	Office and Administrative Support Workers, All Other	Cross-sectional survey	06/01 - 06/14	Egypt	0%	High

Office and Administrative Support Occupations (43-0000)	Kassem et al., 2020 ⁷²	n=7	Office and Administrative Support Workers, All Other	Cross-sectional survey	06/01 - 06/14	Egypt	14.28%	High
Farming, Fishing, and Forestry Occupations (45-0000)	Satpati et al., 2020 ²⁷	n=53	Agricultural Workers	Cross-sectional survey	07/26 - 08/08	India	0%	Moderate
Farming, Fishing, and Forestry Occupations (45-0000)	Addetia et al., 2020 ¹⁹⁰	n=120	Fishers and Related Fishing Workers	Retrospective cohort	05/01 - 05/31	United States of America	5%	High
Farming, Fishing, and Forestry Occupations (45-0000)	Arnaldo et al., 2020 ¹³	n=80	Fishers and Related Fishing Workers	Cross-sectional survey	07/06 - 07/13	Mozambique	5%	High
Construction and Extraction Occupations (47-0000)	Biggs et al., 2020 ³	n=42	Construction Trades Workers	Cross-sectional survey	04/28 - 05/03	United States of America	0%	Moderate
Installation, Maintenance, and Repair Occupations (49-0000)	Blairon et al., 2020 ⁵²	n=134	Other Installation, Maintenance, and Repair Occupations	Cross-sectional survey	05/25 - 06/19	Belgium	16.4%	High
Production Occupations (51-0000)	Picon et al., 2020 ¹⁹¹	n=40	Butchers and Other Meat, Poultry, and Fish Processing Workers	Cross-sectional survey	06/13 - 06/17	Brazil	15%	Moderate
Production Occupations (51-0000)	Picon et al., 2020 ¹⁹¹	n=1087	Miscellaneous Food Processing Workers	Cross-sectional survey	06/13 - 06/17	Brazil	1.47%	Moderate
Production Occupations (51-0000)	Bontadi et al., 2020 ¹⁹²	n=1267	Production Workers, All Other	Cross-sectional survey	04/11 - 04/29	Italy	1.58%	High

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47	Production Occupations (51-0000)	Xu et al., 2020 ¹⁹³	n=442	Production Workers, All Other	Cross-sectional survey	03/09 - 04/10	China	1.4% (0.6-2.9%)	High
	Transportation and Material Moving Occupations (53-0000)	Arnaldo et al., 2020 ¹³	n=248	Transportation and Material Moving Occupations	Cross-sectional survey	07/06 - 07/13	Mozambique	4.8%	High
	Transportation and Material Moving Occupations (53-0000)	Arnaldo et al., 2020 ⁴⁸	n=367	Transportation and Material Moving Occupations	Cross-sectional survey	08/10 - 08/21	Mozambique	7.4%	High
	Transportation and Material Moving Occupations (53-0000)	Arnaldo et al., 2020 ¹⁴	n=112	Transportation and Material Moving Occupations	Cross-sectional survey	11/16 - 11/21	Mozambique	16.1%	High
	Transportation and Material Moving Occupations (53-0000)	Biggs et al., 2020 ³	n=14	Transportation and Material Moving Occupations	Cross-sectional survey	04/28 - 05/03	United States of America	0%	Moderate
	Transportation and Material Moving Occupations (53-0000)	Gudo et al., 2020 ⁶⁵	n=554	Transportation and Material Moving Occupations	Cross-sectional survey	06/17 - 06/30	Mozambique	3% (1-4%)	High
	Transportation and Material Moving Occupations (53-0000)	Langa et al., 2020 ¹⁸¹	n=230	Transportation and Material Moving Occupations	Cross-sectional survey	09/28 - 10/09	Mozambique	0.4%	High
	Transportation and Material Moving Occupations (53-0000)	Mabunda et al., 2020 ¹⁵	n=473	Transportation and Material Moving Occupations	Cross-sectional survey	09/21 - 10/02	Mozambique	8.7%	High
	Transportation and Material Moving Occupations (53-0000)	Macicame et al., 2020 ¹⁸²	n=282	Transportation and Material Moving Occupations	Cross-sectional survey	09/14 - 09/30	Mozambique	3.19%	High

1	Transportation and Material Moving Occupations (53-0000)	Mahomed et al., 2020 ⁸¹	n=334	Transportation and Material Moving Occupations	Cross-sectional survey	08/31 - 10/12	Mozambique	1.5%	High
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3	Transportation and Material Moving Occupations (53-0000)	Mahumane et al., 2020 ⁸²	n=287	Transportation and Material Moving Occupations	Cross-sectional survey	11/02 - 11/17	Mozambique	1%	High
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5	Transportation and Material Moving Occupations (53-0000)	Thani et al., 2020 ¹⁸³	n=435	Transportation and Material Moving Occupations	Cross-sectional survey	07/26 - 09/09	Qatar	53.4%	Moderate
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7	Transportation and Material Moving Occupations (53-0000)	Halatoko et al., 2020 ⁴¹	n=212	Air Transportation Workers	Cross-sectional survey	04/23 - 05/08	Togo	0.9%	High
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9	Transportation and Material Moving Occupations (53-0000)	Viegas et al., 2020 ¹¹⁰	n=623	Air Transportation Workers	Cross-sectional survey	08/03 - 08/21	Mozambique	2.25%	High
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11	Transportation and Material Moving Occupations (53-0000)	Viegas et al., 2020 ¹¹⁰	n=362	Air Transportation Workers	Cross-sectional survey	08/03 - 08/21	Mozambique	3.31%	High
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13	Transportation and Material Moving Occupations (53-0000)	Khan et al., 2020 ¹²⁷	n=57	Ambulance Drivers and Attendants, Except Emergency Medical Technicians	Cross-sectional survey	06/15 - 06/29	India	3.5% (0.9-13.3%)	Moderate
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15	Transportation and Material Moving Occupations (53-0000)	Martinez et al., 2020 ¹²¹	n=30	Heavy and Tractor-Trailer Truck Drivers	Cross-sectional survey	04/16 - 04/17	United States of America	16.67%	High
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17	Transportation and Material Moving Occupations (53-0000)	Siddiqui et al., 2020 ²	n=9	Heavy and Tractor-Trailer Truck Drivers	Prospective cohort	04/15 - 08/15	India	11.1%	High
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1 2 3 4 5 6 7	Transportation and Material Moving Occupations (53-0000)	Halatoko et al., 2020 ⁴¹	n=122	Taxi Drivers and Chauffeurs	Cross-sectional survey	04/23 - 05/08	Togo	0.8%	High
8 9 10 11	Transportation and Material Moving Occupations (53-0000)	Poustchi et al., 2020 ²⁸	n=718	Taxi Drivers and Chauffeurs	Cross-sectional survey	04/17 - 06/02	Iran (Islamic Republic of)	14.1% (11.4-16.9%)	Moderate
12 13 14 15	Transportation and Material Moving Occupations (53-0000)	Alemu et al., 2020 ⁶	n=8	Parking Lot Attendants	Cross-sectional survey	04/23 - 04/28	Ethiopia	12.5%	Moderate
16 17 18 19	Transportation and Material Moving Occupations (53-0000)	Alemu et al., 2020 ⁶	n=110	Laborers and Freight, Stock, and Material Movers, Hand	Cross-sectional survey	04/23 - 04/28	Ethiopia	10%	Moderate
20 21 22 23	Transportation and Material Moving Occupations (53-0000)	Khan et al., 2020 ⁴⁵	n=97	Laborers and Freight, Stock, and Material Movers, Hand	Cross-sectional survey	07/01 - 07/15	India	2.1% (0.5-7.9%)	Moderate
24 25 26 27 28	Transportation and Material Moving Occupations (53-0000)	Satpati et al., 2020 ²⁷	n=63	Laborers and Freight, Stock, and Material Movers, Hand	Cross-sectional survey	07/26 - 08/08	India	12.7%	Moderate
29 30 31 32	Not employed (mixed)*	Carrat et al., 2020 ⁴	n=6295	Unemployed	Prospective cohort	05/04 - 06/23	France	4.9% (4.1-5.6%)	Moderate
33 34 35 36 37	Not employed (mixed)*	Carrat et al., 2020 ⁴	n=1457	Unemployed	Prospective cohort	05/04 - 06/23	France	8.3% (6.4-10%)	Moderate
38 39 40 41 42 43 44 45 46 47	Not employed (mixed)*	Carrat et al., 2020 ⁴	n=306	Unemployed	Prospective cohort	05/04 - 06/23	France	7.2% (2.3-11.1%)	Moderate
	Not employed (mixed)*	Carrat et al., 2020 ⁴	n=125	Unemployed	Prospective cohort	05/04 - 06/23	France	3.8% (0.5-6.3%)	Moderate
	Not employed (mixed)*	Carrat et al., 2020 ⁴	n=402	Unemployed	Prospective cohort	05/04 - 06/23	France	7.8% (4.7-10.4%)	Moderate

Not employed (mixed)*	Chamie et al., 2020 ¹⁹⁴	n=230	Unemployed	Cross-sectional survey	04/25 - 04/28	United States of America	4.3%	Moderate
Not employed (mixed)*	McLaughlin et al., 2020 ¹⁹⁵	n=241	Unemployed	Cross-sectional survey	05/04 - 05/19	United States of America	19.3% (14.6-24.5%)	Moderate
Not employed (mixed)*	Merkely et al., 2020 ¹	n=1095	Unemployed	Cross-sectional survey	05/01 - 05/16	Hungary	0.43% (0.16-0.84%)	Moderate
Not employed (mixed)*	Munoz et al., 2020 ¹⁹⁶	n=905	Unemployed	Cross-sectional survey	07/15 - 07/16	Argentina	20%	Moderate
Not employed (mixed)*	Richard et al., 2020 ⁵	n=549	Unemployed	Cross-sectional survey	04/06 - 06/30	Switzerland	6%	Low
Not employed (mixed)*	Satpati et al., 2020 ²⁷	n=47	Unemployed	Cross-sectional survey	07/26 - 08/08	India	2.13%	Moderate
Not employed (mixed)*	Ward et al., 2020 ¹¹³	n=59369	Unemployed	Cross-sectional survey	09/15 - 09/28	The United Kingdom	3.35%	Moderate

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