## FINAL TECHNICAL REPORT THE UNIVERSITY OF BRITISH COLUMBIA

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IDRC GRANT / SUBVENTION DU CRDI : - PROTECTING HEALTHCARE WORKERS FROM COVID-19

# **Protecting healthcare workers from COVID-19:**

# A comparative contextualized analysis

Final technical report

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### i) Abstract

Healthcare workers (HCWs) are at high risk of occupational exposure to infectious diseases if not adequately protected, as well-documented in outbreaks of SARS, MERS, and Ebola <sup>1-3</sup> and ongoing exposure to tuberculosis in high-burden settings <sup>4</sup>. The COVID-19 pandemic has drawn further attention to adequately protecting HCWs worldwide as they care for COVID-19 patients while also trying to meet ongoing healthcare demands amid chronic global HCW shortages. Significant pressures associated with the increased health system burden faced by HCWs during the pandemic include risk of infection, stigmatization and anxieties about family transmission 5, along with fatigue, burnout, stress 6,7 and shortages of personal protective equipment (PPE) <sup>8,9</sup>. However, while there is general agreement on many aspects of policy to protect the physical and mental health of HCWs, approaches to implementation diverge widely 10. Moreover, while it is agreed that cross-disciplinary efforts need to be well-integrated and not operate at "cross purposes" 11, often infection prevention and control (IPC) and public health measures are inconsistent and vary widely across jurisdictions. Differences may be due to variable availability of PPE (e.g. N95 respirators, masks, gloves, gowns); diverse operational needs (e.g. service demands requiring allowing COVID-exposed HCWs to work rather than self-isolating); lack of test kits or related reagents (e.g. as return-to-work criteria); and availability of trained personnel for exposure monitoring, testing strategy and contact tracing for HCWs may also differ widely.

This research aimed to examine "what works to protect healthcare workers (HCWs) during the COVID-19 pandemic, in what contexts, using what mechanism, to achieve what outcome".

We conducted several sub-studies, including a cross-sectional analysis of an international online survey building on the fact that this research is co-lead by two World Health Organization (WHO) collaborating centres; a cohort study and nested case-control investigation in the Canadian context; and, in the South African context, a mental health study in HCWs in one hospital, an information system implementation study in four hospitals as part of improving occupational health, and the use of an occupational health information system the approximately 350 national laboratories across the country. We then synthesized insights across all studies.

Our research showed that rigorously adopting combined public health, infection control and occupational health measures can indeed protect the healthcare workforce; that training and preventive initiatives can also reduce workplace stress; that frontline care-aides were most likely to be infected and least likely to be vaccinated in the Canadian setting, and that there was an urban-rural divide in this regard; and in South Africa, as elsewhere in the Global South, we learned that many health facilities were not well prepared to protect HCWs, and that strengthening occupational health information systems would be much welcomed.

We also explored the extent to which working as a partnership in the Global North and Global South added synergistic insights to a multi-methods research program, examining the contextual characteristics and mechanisms affecting outcomes at micro, meso and macro levels in each project. We found that working as a partnership enabled triangulated assessment of how contextual factors may affect mechanisms and outcomes for worker protection.

### ii) The Research Problem

During pandemics, HCWs are on the frontlines, striving to care for patients while trying to manage regular and ongoing healthcare demands. Significant pressures faced by HCWs during the COVID-19 pandemic, in addition to potential occupational infectious exposures<sup>1,12,13</sup>, include an increased health system burden, HCW shortages, mental health stresses, stigmatization, and concerns about family transmission<sup>5,14-17</sup>. Whilst the world and individuals had differing experiences of COVID-19 we sought to understand factors impacting the circumstances by asking "what works to protect healthcare workers (HCWs) during the COVID-19 pandemic, in what contexts, using what mechanism, to achieve what outcome".

### iii) Objectives

Our research began with the following objectives:

- 1) To characterize and assess the risk factors for COVID-19 infection in healthcare workers (HCWs):
  - Which HCWs became infected, by occupation, exposures, settings and demographics; and what proportion of these may have been occupational?
  - How has this differed in different settings?
- 2) To evaluate the effectiveness of current COVID-19 Infection Prevention and Control (IPC), Public Health and Occupational Health measures to protect HCWs:
  - Have the PPE policies and other Public Health measures, including vaccine strategies been effective in protecting HCWs?
  - How have the different disciplinary perspectives and mandates of public health (overall population), infection control (patients), and workforce (occupational health), interacted?
  - What lessons have been learned?
- 3) To determine the physical and mental health effects of this crisis on HCWs?
  - How has the overall well-being of the healthcare workforce been impacted?
  - And what policies could be considered to mitigate these in future?

As discussed below, we accomplished these objectives quite satisfactorily, and expanded upon them, as noted below.

### iv) Projects:

We used both quantitative and qualitative methods throughout our work to better understand the context and the outcomes.

### Cohort study to Assess Prevention of COVID-19 in HCWs in a well-resourced Canadian context:

In Vancouver Coastal Health (VCH), British Columbia, one of 5 health regions, we evaluated measures to protect healthcare workers (HCWs) including assessing occupational exposures, characterizing risks within and between healthcare occupations – to evaluate PH, IPAC and prevention measures.

Working with colleagues in Interior Health (IH), another health region in BC, made up of more "rural" locations we also sought to better understand uptake of vaccination in HCWs. BC employs a vaccine mandate with regard to COVID-19 vaccination for HCWs and we also wanted to better understand if this had an impact on uptake. Thus, we tracked laboratory-confirmed SARS-CoV-2 infections, positivity rates, and vaccine uptake in all 29,021 HCWs in Interior Health (IH) and all 24,634 HCWs in VCH, by occupation, age, and home location, comparing to the general population in that region.

The cohort study thus had two main objectives. First, to assess the risk of COVID-19 infections in the cohort of HCWs compared to the general population, including identifying risk by subsector and occupational group; and secondly, to assess the impact of vaccination on COVID-19 infection in HCWs. Thirdly, we wished to assess the impact of infection rates as well as the mandate on vaccination uptake.

Using surveillance data since the pandemic began, we tracked laboratory-confirmed SARS-CoV-2 infections, positivity rates, and vaccine uptake, by occupation and subsector, and compared to the general population. Cox regression modelling adjusted for age and calendar-time calculated vaccine effectiveness (VE) against SARS-CoV-2 in fully vaccinated (≥ 7 days post-second dose), partially vaccinated infection (after 14 days) and unvaccinated HCWs; we also compared with unvaccinated community members of the same age-range.

Only 3.3% of our HCWs became infected, mirroring community rates, with peak positivity of 9.1%, compared to 11.8% in the community. As vaccine coverage increased, SARS-CoV-2 infections declined significantly in HCWs, despite a surge with predominantly variants of concern (VOC); unvaccinated HCWs had an infection rate of 1.3/10,000 person-days compared to 0.89 for HCWs post first dose, and 0.30 for fully vaccinated HCWs. Vaccine effectiveness (VE) compared to unvaccinated HCWs was 37.2% (95% CI: 16.6–52.7%) 14 days post-first dose, 79.2% (CI: 64.6–87.8%) 7 days post-second dose; one dose provided significant protection against infection until at least day 42. Compared with community infection rates, VE after one dose was 54.7% (CI: 44.8–62.9%); and 84.8% (CI: 75.2–90.7%) when fully vaccinated.

We concluded that rigorous droplet-contact precautions with N95s for aerosol-generating medical procedures are effective in preventing occupational infection in HCWs, with one dose of mRNA vaccination further reducing infection risk despite VOC and transmissibility concerns. The policy of delaying second doses to allow more widespread vaccination against severe disease, with strict public health, occupational health and infection control measures, was effective in protecting the healthcare workforce.

By October 27, 2021, the date that unvaccinated HCWs were prohibited from providing healthcare, only 1.6% in VCH compared with 6.5% in IH remained unvaccinated. Rural workers in both areas had significantly higher unvaccinated rates compared with urban dwellers. Over 1,800 workers, comprising 6.7% of rural HCWs and 3.6% of urban HCWs, remained unvaccinated and set to be terminated from their employment. While the mandate prompted a significant increase in uptake of second doses, the impact on the unvaccinated was less clear. As rural areas often suffer from under-staffing, loss of HCWs could have serious impacts on healthcare provision as well as on the livelihoods of unvaccinated HCWs. Greater efforts are needed to understand how to better address the drivers of rural-related vaccine hesitancy in Canada as well as globally.

### Case control study of determinants of infection in HCWs in Vancouver, Canada:

In order to better understand the context in this cohort we undertook a mixed methods study to investigate occupational and non-work-related risk factors of COVID-19 infection as well as to examine how HCWs described their experiences. Using a matched case-control design, data came from online and phone questionnaires with optional open-ended questions completed by HCWs who sought COVID-19 testing between March 2020 and March 2021. Conditional logistic regression and thematic analysis were utilized. We found that providing direct care to COVID-19 patients during the intermediate cohort period (adjusted odds ratio, 1.90; 95% confidence interval, 1.04 to 3.46) and community exposure to a known case in the late cohort period (adjusted odds ratio, 3.595%; confidence interval, 1.86 to 6.83) were associated with higher infection odds. Suboptimal communication, mental stress, and situations perceived as unsafe were common sources of dissatisfaction by those HCWs surveyed. Varying levels of risk between occupational groups call for wider targeting of infection prevention measures. Strategies for mitigating community exposure and supporting HCW resilience are required.

From this work we concluded that HCWs indeed had differing experiences depending on their occupation, facility and demographics.

### World Health Organization (WHO) Survey:

An online survey was designed and implemented by a WHO Ad Hoc working group that involved members of our research team from both Canada and South Africa. It was administered early in the pandemic and consisted of a global self-administered online survey conducted by a network of occupational health experts coordinated by WHO through a large array of professional networks and social media. Our team worked with WHO to analyze the results. A total of 4,977 HCWs and healthcare delivery stakeholders from 161 countries responded to health and safety risk questions and a subset of 4076 (81.2%) answered mitigation measure questions. The majority (65%) of study participants were female.

While the levels of risk being experienced at the pandemic's onset were consistently deemed as unacceptable across all groupings, participants from countries with less income inequality were somewhat less likely to report unacceptable levels of risk to HCWs regarding both workplace environment (OR=0.92, p=0.012) and workplace organizational factors (OR=0.93, p=0.017) compared with counterparts in more unequal national settings. In contrast, considerable variation existed in the degree to which mitigation measures were considered adequate. Adjusting for other influences through a logistic regression analysis, respondents from lower middle-income and low-income countries were comparatively much more likely to assess both occupational health and safety (OR=10.91, p≤0.001) and infection prevention and control (IPC) (OR=6.61, p=0.001) protection measures as inadequate, despite much higher COVID-19 rates in wealthier countries at the time of the survey. Greater within-country income inequality was also associated with perceptions of less adequate infection prevention measures (OR=0.94, p=0.025). These associations remained significant when accounting for country-level differences in occupational and gender composition of respondents, including specifically when only female care providers, our study's largest and most at-risk subpopulation, were examined. A major strength of the study is its novel empirical testing of the 'income inequality' hypothesis for a comparative cross-country analysis of a major global health challenge: protection for a workforce central to the provision of healthcare services during a pandemic.

### Mental health study of HCWs in South Africa:

Understanding from our work that mental health is a key factor for HCWs in dealing with the pandemic as well as the resulting workload we decide to focus on an examination of workplace contextual factors associated with how psychological distress was experienced in a South African setting where a severe first wave was being experienced with the objective of identifying factors that can protect against HCWs experiencing negative impacts. Consistent with mounting literature on mental health effects, we found a high degree of psychological distress (57.4% above the General Health Questionnaire cut-off value) and a strong association between perceived risks associated with the presence of COVID-19 in the healthcare workplace and psychological distress (adjusted OR = 2.35, p < 0.01). Our research indicates that both training (adjusted OR 0.41, 95% CI 0.21–0.81) and the reported presence of supportive workplace relationships (adjusted OR 0.52, 95% CI 0.27–0.97) were associated with positive outcomes. This evidence that workplace resilience can be reinforced to better prepare for the onset of similar outbreaks in the future suggests that pursuit of further research into specific interventions to improve resilience is well merited.

# Occupational Health and Safety Information System (OHASIS) implementation in South Africa's laboratories:

In South Africa, the National Health Laboratory Services (NHLS) is responsible for the management of all 349 labs across the country. A central occupational health and information system (OHASIS) has incident modules for recording and tracking workplace incidents by exposure, cause, contributing factors and effect. It facilitates incident investigations, including recommended prevention measures. The software produces a variety of relevant reports for health and safety committees, managers, and senior executives. These data were merged with payroll and HR data to investigate associations between COVID-19 and work, co-morbidity and vaccine uptake. In addition, a survey has been administered to workers in NHLS asking specific questions about stress, burnout, if they know how to contact their OHS rep, etc. (see appendix for questionnaire). A total of 333 responses have been received and these are set to be analyzed later this month.

### Use of occupational health information systems in four South African hospitals:

A baseline study was conducted which aimed to determine access and utilization of occupational health information by occupational health and safety (OHS) stakeholders (managers, health and safety representatives and committees, and trade unions). This was a cross-sectional survey of OHS stakeholders, conducted as part of a larger quasi-experimental study, in four teaching hospitals located in a poor and rich province in South Africa. The study hospitals, provinces and participants were purposefully selected. The researchers collected data using a validated modified questionnaire with both closed and open-ended questions. Quantitative analysis was done on Microsoft excel, and themes identified for the analysis of the qualitative data. Approval and ethics clearance were provided by the provincial governments, hospitals and the University of Pretoria; participation was voluntary after training on informed consent. We had 71 participants; 56% were female, 44% hospital managers, 20% HSRC, 15% trade union and 21% OHS professionals. At least 42% reported poor accessibility and poor timelines of the occupational health information for decision making. There was 50% access to computers and 27% participants reported poor computer skills. Existing systems were poorly organized and in need of upgrades, while 85% reported that existing systems need significant reforms. Only 45% reported use of information for decision making in their OHS role. We have identified a clear gap in access and utilization of the occupational health information to improve OHS systems, and we

recommend an education and training programme for occupational health information in South African hospitals.

### v) Project Activities

Our team met through monthly Zoom meetings. We also held sub-team meetings as needed on specific project tools and deliverables. It was crucial throughout to ensure we met to keep the projects momentum and to interact on key milestones.

Problems that arose that affected our original plans included difficulties in obtaining access to data in South Africa and then, in turn, difficulties getting ethical approval for our South African cohort and case-control study in a timely way. These components of the project did not happen in South Africa because of these hurdles. However, this allowed more focus on the projects that were able to go ahead expediently in South Africa and there the lessons learned about different approaches to occupational health and safety data in different jurisdictions provided value insights.

### vi) Project Outputs

We have had many outputs in the form of publications and conference presentations – see below.

Additionally, the project solidified and expanded research networks and relationships, not only amongst the original research team members, but also with new researchers and knowledge users in each of the sub-projects. These included researchers from disciplines that were not previously included (such as psychiatry), as well as from regions not previously involved in such research (such as Interior Health in British Columbia).

Through the use of Zoom, we were able to meet regularly, as noted above. Our ability to communicate regularly has been greatly increased from what it was in our previous work together.

Our research team found that working through a North-South partnership enabled triangulated assessment of how contextual factors may affect mechanisms and outcomes for worker protection. As the pandemic evolved, and decisions were being made in "real-time", the importance of collaborating across jurisdictions in the gathering and sharing of place-based contextualized knowledge was imperative to our success.

All aspects of the projects engaged practitioners and decision-makers, such that the knowledge translation value of the research was very high. As an example, the insights on information system use in occupational health in South Africa is not only information policy and practice in South Africa but also in British Columbia.

Overall, working together in a North-South partnership added considerably more insight than had each team operated in isolation.

### Published refereed articles:

Yassi A, Grant JM, Lockhart K, Barker S, Sprague S, Okpani AI, Wong T, Daly P, Henderson W, Lubin S, Kim Sing C. Infection control, occupational and public health measures including mRNA-based vaccination against SARS-CoV-2 infections to protect healthcare workers from variants of concern: A 14-month observational study using surveillance data. **PLoS One.** 2021 Jul 16;16(7):e0254920.

Lee HL, Wilson KS, Bernstein C, Naicker N, Yassi A, Spiegel JM. Psychological Distress in South African Healthcare Workers Early in the COVID-19 Pandemic: An Analysis of Associations and Mitigating Factors. International journal of environmental research and public health. 2022 Aug 7;19(15):9722.

Okpani AI, Barker S, Lockhart K, Grant J, Delgado-Ron JA, Zungu M, Naicker N, Ehrlich R, Yassi A. A mixed-methods study of risk factors and experiences of healthcare workers tested for the novel coronavirus in Canada. **Journal of Occupational & Environmental Medicine**. 2022 Sep 11;64(9):e559-66.

Harrigan S, Tsang VWL, Yassi A, Zungu M, Spiegel JM. Impacts of economic inequality on healthcare worker safety at the onset of the COVID-19 pandemic: Cross-sectional analysis of a global survey. **BMJ Open**. 2022. 12(10), e064804.

### In press peer-reviewed articles:

Yassi A, Barker S, Lockhart K, Taylor D, Okpani AI, Harris D, Hundal H, Sprague S, Grant JM, Pollock S, Kim Sing C. COVID-19 infection and vaccination rates in healthcare workers in British Columbia, Canada: A Longitudinal Urban versus Rural Analysis of the Impact of the Vaccine Mandate. **Canadian Journal of Rural Medicine**. 2022, *in press*.

### Submitted peer-reviewed articles:

Spiegel JM, Lockhart K, Zungu M, Yassi A. Protecting healthcare workers during a pandemic: Realist evaluation of a WHO collaborating centre research partnership. **Pan American Journal of Public Health**. *Submitted June 2022*.

### Conference abstracts:

Zungu Z, Voyi K, Lockhart K, Yassi A, Ramodike J, Thunzi N, Spiegel JM. Baseline assessment of occupational health and safety information system use in South African hospitals, The 2nd Annual Conference on Public Health in Africa (CPHIA 2022), 13-15 December; Kigali Convention Centre, Kigali Rwanda.

Okpani A, Barker S, Lockhart K, Grant JM, Delgado-Ron A, Spiegel JM, Zungu M, Kgalamono S, Senabe S, Jones D, Naicker N, Ehrlich R, Mukuduh H, Yassi A. A mixed methods study of risk factors and lived experiences of health care workers tested for the novel coronavirus in Canada. *ICOH Conference 2022*.

Zungu M, Yassi A, Voyi K, Ramodike J, Kgalamono S, Senabe S, Naicker N, Thunzi N, Okpani A, Delgado-Ron A, Mukuduh H, Spiegel JM. Occupational health information systems for health workers during the COVID-19 pandemic in South Africa. *ICOH Conference 2022*.

Delgado-Ron A, Naicker N, Bernstein C, Kgalamono S, Mdume N, Gemell G, Yassi A, Spiegel JM, Wilson K. Mental health effects of COVID-19 in healthcare workers of a tertiary South African Hospital: a cross-sectional analysis. *ICOH Conference 2022*.

Kim Sing C, et al. A 14-month observational study using surveillance data of healthcare workers in Vancouver Coastal Health. *Quality Forum 2022*.

Harrigan S, Tsang V, Spiegel JM, Yassi A. Health workers' safety at the onset of the COVID-19 pandemic: impacts of wealth disparity across and within countries. *Canadian Conference on Global Health. 2021.* 

Zungu et al. Challenges and lessons from a South African-Canadian collaboration: comparative contextualized analysis within a research program to reduce the burden of COVID-19 among health workers. *Canadian Conference on Global Health.* 2021.

Spiegel et al. A research program to provide a comparative contextualized analysis of occupational COVID-19 among health workers: Preliminary insights from a South African-Canadian Collaboration. *EPiCOH Conference 2021*.

### Published reports:

Harrigan S, Tsang VWL, Spiegel JM, Yassi A. <u>Health and safety of health workers in the context of COVID-19: A global survey</u>. September 15, 2020.

Plus: numerous talks for a wide variety of audiences – from the local to international levels.

### vii) Project Outcomes

Our Vancouver cohort study, in which excellent protection of HCWs was present in a setting of high rates of vaccination and availability of IPC resources, shone a light on what could be achieved if similar rates of vaccination and implementation of control measures were to be implemented. The team had originally hoped to conduct parallel cohort and case-control studies in both North and South jurisdictions, however, access to a comprehensive database on HCW infections was not achieved in our South African context, thus this is not possible. As such, involvement of the partnership in this study also served as an impetus to further implement the occupational health and safety information system in healthcare to be able to operationally monitor and study such issues in the South African context as well (OHS sub-study and OHASIS sub-study).

Interestingly while we could not conduct a case control or cohort study in SA because of lack of data we could conduct a workplace audit type study in SA that was not possible in Canada because of lack of that type of data here. As the development of information systems has been a long-standing collaboration our team, study findings from South Africa will be combined with observations from information system implementation in Canada to inform further analysis and research on what factors and processes support effective implementation of information systems that allow for operational monitoring and research related to both the workplace and the workforce, with a perspective that the resulting South African system and its implementation will be more comprehensive, so new lessons can be further shared building on earlier collaborative research.

In summary, we found the universality of mental and physical health risks for HCWs while also calling attention to the reality that workplace risks during COVID are not equally borne, nor are the tools for research equally available. We established that facilities in low- and middle-income countries were more

poorly prepared for the pandemic than their wealthier counterparts and that HCWs who were at the lower end of the socioeconomic (SE) spectrum (such as nursing aides) were at higher risk of getting COVID-19 than higher SE populations (such as medical staff) both from workplace exposures and community SE-related factors.

Our work not only underlined the importance of attending to social determinants of health across the region and globally both within and amongst different countries, but shone light on the value of a comprehensive information system in order to monitor progress in this area. Our current collaborative work now focuses on sharing lessons regarding vaccine uptake from Canada to SA; and sharing the SA approach to workplace-focused OH with Canadian healthcare settings, drawing attention to those areas of OH not addressed by Public Health and IPC here. As such, the lessons learned have been multi-directional. Overall, we argue that international collaborations – whether to bolster calls for global vaccine accessibility and availability of PPE, or to share lessons on the approach and information tools to protecting HCWs – are not only useful for improving local implementation of protective approaches but also to promote the solidarity needed to protect the wellbeing of the healthcare workforce globally.

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# Appendix of tools

# **Case Control Vancouver**

Start of Block: 1. Identifier and basic information Q1.1 Instruction: The information collected below will not be linked to your confidential personal information. Please answer the questions below honestly. Your data will help us to understand the potential risk factors for SARS-CoV-2 infection among health workers and to prevent future infections of health workers. Q1.2 Gender Female (1) Male (2) O Non-binary (3) O Intersex (4) Other (specify) (5) \_\_\_\_\_ Prefer not to answer (6) Q1.3 Year of birth **▼** 2004 (4) ... 1920 (89) Q1.4 Postal code (only the first 3 characters, e.g. V6T)

Page Break		

Q1.5 Status in Canada	
○ Citizen (1)	
O Permanent resident (2)	
○ Visitor (3)	
O Prefer not to answer (4)	
Q1.6 Are you an Indigenous person?	
○ Yes (1)	
○ No (2)	
O Prefer not to answer (3)	
Q1.7 Race / ethnicity	
O Asian (1)	
O Black (2)	
O Hispanic or Latinx (3)	
O Non-Hispanic white (4)	
Other (specify) (5)	
O Prefer not to answer (6)	
Page Break ————————————————————————————————————	

Q104 Did you work with the Vancouver Coastal Health Authority at any time between March 1, 2020 and the present day? (This could be as an employee, contractor, consultant, volunteer, etc.)	
O Yes (1)	
O No (2)	

Q1.8 Occupation in health care facility (please select the option that most closely describes your occupation)
O Medical doctor (1)
Registered nurse (or equivalent) (2)
Assistant nurse, nurse technician (or equivalent) (3)
Radiology / x-ray technician (4)
O Phlebotomist (5)
O Pharmacist (6)
O Physical therapist (7)
Care aide (8)
O Nutritionist / dietician (9)
Caboratory personnel (10)
O Admission / reception clerk (11)
O Patient transporter (12)
Catering staff (13)
Cleaner (14)
O Administration / clerk (15)
Other (specify) (16)

Q1.9 Work setting
O Acute care (1)
O Community (2)
O Long-term care (3)
Q1.10 Education level
O None (1)
O Primary (2)
O Secondary (3)
O Tertiary / University (4)
O Postgraduate (5)
O Prefer not to answer (6)
End of Block: 1. Identifier and basic information
Start of Block: 2. Testing context
JS *
Q2.1 COVID-19 test date  If you have taken the COVID-19 test more than once, please provide the date for the test for which you have the clearest recall of your activities in the 2 weeks before it. If you are unsure of the date, please use the best estimate possible.  (yyyy/mm/dd)
Page Break ————————————————————————————————————

Q2.2 Before this test date, had you received any dose of the COVID-19 vaccine?
○ Yes (1)
O No (2)
If yes, first dose(DATE RECEIVED)
If yes, second dose(DATE RECEIVED)
Q2.3 Does your job involve direct care for COVID-19 patients?
○ Yes (1)
O No (2)
Display This Question:  If Does your job involve direct care for COVID-19 patients? = Yes
Q2.3 Please specify the number of days dedicated to COVID-19 patients only during the 2 weeks before your test date:
▼ 0 (1) 14 (15)

Q2.4 In the 2 weeks before your test, what section of the health facility did you spend the most working hours in? (Select only one)
○ Emergency room (1)
Outpatient clinic (2)
O Inpatient ward / room (3)
O Intensive care (4)
O NICU (5)
O Theatre (6)
O Lab (7)
○ Radiology (8)
Reception / triage (9)
O Security (10)
O Non-patient access areas (11)
Other (specify) (12)
Page Break

for 15 minutes or more) with a person or persons <b>known</b> to have been diagnosed with <b>COVID-19</b> in the 14 days before your test?
○ Yes (1)
○ No (2)
O Not sure / unaware (3)
Display This Question:  If Outside of your occupational duties, were you in extended close contact (within 2 meters for 15 m  = Yes
Q2.6 Was this contact: (Check all that apply)
Household contact: school-age child (1)
Household contact: other household member (5)
Professional colleague(s) (2)
Everyday social interactions (e.g. school, religious event, public transport, restaurant, grocery store, café) (3)
Other (specify) (4)
Display This Question:  If Outside of your occupational duties, were you in extended close contact (within 2 meters for 15 m  = Yes

Q2.7 How long was this contact?	
O Most days (≥ 8 days) (1)	
O Some days (4 - 7 days) (2)	
○ Few days (1 - 3 days) (3)	
C Less than a day (4)	
Page Break	

Q2.8 Outside of your occupational duties, were you in extended close contact (within 2 meter for 15 minutes or more) with a person or persons with <b>symptoms related to COVID-19</b> in the 2 weeks before your test? Symptoms may include fever, cough, runny nose, sore throat, shortness of breath, etc.
○ Yes (1)
O No (2)
O Not sure (3)
Display This Question:  If Outside of your occupational duties, were you in extended close contact (within 2 meter for 15 mi  = Yes
Q2.9 Was this contact: (Check all that apply)
Household contact: school-age child (1)
Household contact: other household member (5)
Professional colleague(s) (2)
Everyday social interactions (e.g. school, religious event, public transport, restaurant, grocery store, café) (3)
Other (specify) (4)
Display This Question:  If Outside of your occupational duties, were you in extended close contact (within 2 meter for 15 mi  = Yes

Q2.10 How long was this contact?		
O Most days (≥ 8 days) (1)		
O Some days (4 - 7 days) (2)		
○ Few days (1 - 3 days) (3)		
C Less than a day (4)		
Page Break ————		

Q2.11
In the 2 weeks before your test, did you return from international travel?
○ Yes (1)
O No (2)
Display This Question:
If In the 2 weeks before your test, did you return from international travel? = Yes
00.40 Which accounts 0
Q2.12 Which country?
Page Break ————————————————————————————————————

<ul> <li>Most days (≥ 8 days) (1)</li> <li>Some days (4 - 7 days) (2)</li> <li>Few days (≤ 3 days) (3)</li> <li>Did not use public transport (4)</li> </ul> Display This Question: <ul> <li>If In the 2 weeks before your test, how often did you use public transport? != Did not use public transport</li> </ul> Q2.14 What means of public transport did you use most frequently in that period? (Select only one) <ul> <li>Train (1)</li> <li>Bus (2)</li> <li>Taxi or ride hailing (regular taxi, Uber, Lyft, etc.) (3)</li> <li>Ferry (4)</li> <li>Car share (Evo, Modo, etc.) (5)</li> <li>Carpool (6)</li> <li>Bike share (8)</li> <li>Mix of the above means (9)</li> </ul> Display This Question: <ul> <li>If In the 2 weeks before your test, how often did you use public transport? In Did not use public</li> </ul> Display This Question: If In the 2 weeks before your test, how often did you use public transport? In Did not use public If In the 2 weeks before your test, how often did you use public transport? In Did not use public If In the 2 weeks before your test, how often did you use public transport? In Did not use public	Q2.13 In the 2 weeks before your test, how often did you use public transport?
Few days (≤ 3 days) (3)  Did not use public transport (4)  Display This Question:  If In the 2 weeks before your test, how often did you use public transport? != Did not use public transport  Q2.14 What means of public transport did you use most frequently in that period? (Select only one)  Train (1)  Bus (2)  Taxi or ride hailing (regular taxi, Uber, Lyft, etc.) (3)  Ferry (4)  Car share (Evo, Modo, etc.) (5)  Carpool (6)  Bike share (8)  Mix of the above means (9)	O Most days (≥ 8 days) (1)
<ul> <li>Display This Question:     If In the 2 weeks before your test, how often did you use public transport? != Did not use public transport</li> <li>Q2.14 What means of public transport did you use most frequently in that period? (Select only one)</li> <li>Train (1)</li> <li>Bus (2)</li> <li>Taxi or ride hailing (regular taxi, Uber, Lyft, etc.) (3)</li> <li>Ferry (4)</li> <li>Car share (Evo, Modo, etc.) (5)</li> <li>Carpool (6)</li> <li>Bike share (8)</li> <li>Mix of the above means (9)</li> </ul>	○ Some days (4 - 7 days) (2)
Display This Question:  If In the 2 weeks before your test, how often did you use public transport? != Did not use public transport  Q2.14 What means of public transport did you use most frequently in that period? (Select only one)  Train (1)  Bus (2)  Taxi or ride hailing (regular taxi, Uber, Lyft, etc.) (3)  Ferry (4)  Car share (Evo, Modo, etc.) (5)  Carpool (6)  Bike share (8)  Mix of the above means (9)	○ Few days (≤ 3 days) (3)
If In the 2 weeks before your test, how often did you use public transport? != Did not use public transport  Q2.14 What means of public transport did you use most frequently in that period? (Select only one)  Train (1)  Bus (2)  Taxi or ride hailing (regular taxi, Uber, Lyft, etc.) (3)  Ferry (4)  Car share (Evo, Modo, etc.) (5)  Carpool (6)  Bike share (8)  Mix of the above means (9)	O Did not use public transport (4)
One)  Train (1)  Bus (2)  Taxi or ride hailing (regular taxi, Uber, Lyft, etc.) (3)  Ferry (4)  Car share (Evo, Modo, etc.) (5)  Carpool (6)  Bike share (8)  Mix of the above means (9)	If In the 2 weeks before your test, how often did you use public transport? != Did not use public
Bus (2) Taxi or ride hailing (regular taxi, Uber, Lyft, etc.) (3) Ferry (4) Car share (Evo, Modo, etc.) (5) Carpool (6) Bike share (8) Mix of the above means (9)	
Taxi or ride hailing (regular taxi, Uber, Lyft, etc.) (3)  Ferry (4)  Car share (Evo, Modo, etc.) (5)  Carpool (6)  Bike share (8)  Mix of the above means (9)	○ Train (1)
<ul> <li>Ferry (4)</li> <li>Car share (Evo, Modo, etc.) (5)</li> <li>Carpool (6)</li> <li>Bike share (8)</li> <li>Mix of the above means (9)</li> </ul> Display This Question:	O Bus (2)
Car share (Evo, Modo, etc.) (5) Carpool (6) Bike share (8) Mix of the above means (9)  Display This Question:	Taxi or ride hailing (regular taxi, Uber, Lyft, etc.) (3)
Carpool (6) Bike share (8) Mix of the above means (9)  Display This Question:	O Ferry (4)
○ Bike share (8) ○ Mix of the above means (9)  Display This Question:	Car share (Evo, Modo, etc.) (5)
O Mix of the above means (9)  Display This Question:	○ Carpool (6)
Display This Question:	O Bike share (8)
	O Mix of the above means (9)
	Display This Question:  If In the 2 weeks before your test, how often did you use public transport? != Did not use public

Version 3, Jan. 28, 2021, H20-02517

transport

Q2.15 Whilst in publi (Check all tha	c transport, what precautions did you utilize? t apply)
	Face mask (1)
	Physical distancing, when possible (2)
	⊗None (3)
Display This Qu	
If Whilst in	public transport, what precautions did you utilize? (Check all that apply) = Face mask
Q2.16 What ty	pe of face mask did you use most frequently on public transport?
O N95 or	equivalent (1)
O Surgic	al mask (2)
O Cloth/f	abric mask (3)
Other	(specify) (4)
Page Break	

Q2.17 In the 2 weeks before your test, how often did you have social interaction with individuals outside of work, home or transport (e.g. in bars, clubs, shops, parties, religious events, funerals etc.)?
O Most days (≥ 8 days) (1)
O Some days (4 - 7 days) (2)
○ Few days (≤ 3 days) (3)
O Did not have any such social interactions (4)
Display This Question:
If In the 2 weeks before your test, how often did you have social interaction with individuals outsi!=  Did not have any such social interactions
Q2.18 Which of these applied most to the social interaction(s)?
O Activity was held outdoors (1)
O Activity was held indoors (2)
O Mix of both (3)
Display This Question:
If In the 2 weeks before your test, how often did you have social interaction with individuals outsi != Did not have any such social interactions

Q2.19 Which of these precautions were taken during most social interaction(s)?
○ Face masks and physical distancing (1)
O Face masks, but no physical distancing (2)
O Physical distancing, but no face masks (3)
O No masks or distancing precautions (4)
Display This Question:
If Which of these precautions were taken during most social interaction(s)? = Face masks and physical distancing
Or Which of these precautions were taken during most social interaction(s)? = Face masks, but no physical distancing
Q2.20 What type of mask did you use most frequently?
○ N95 or equivalent (1)
O Surgical mask (2)
O Cloth / fabric mask (3)
Other (specify) (4)

### Display This Question:

If In the 2 weeks before your test, how often did you have social interaction with individuals outsi... != Did not have any such social interactions

Q2.21 Approximately how many people outside your household contacts were present at the largest gathering you attended?	
O Less than 5 (1)	
O 5 - 15 (2)	
O 15 - 30 (3)	
O 31 - 50 (4)	
O More than 50 (5)	
Page Break —	

Q2.22 In the 2 weeks before your test, were you in extended close contact (within 2 metres for 15 minutes or more) with co-workers <b>at work</b> ? This includes contact in break/coffee rooms.
○ Yes (1)
O No (2)
Display This Question:
If In the 2 weeks before your test, were you in extended close contact (within 2 metres for 15 minut = Yes
Q2.23 How frequently were you in extended close contact with co-workers at work?
O Most days (≥ 8 days) (1)
O Some days (4 - 7 days) (2)
○ Few days (1 - 3 days) (3)
C Less than a day (4)
Display This Question:
If In the 2 weeks before your test, were you in extended close contact (within 2 metres for 15 minut = Yes
*

Q2.24 Please tick the box that best describes how OFTEN you used personal protective equipment (PPE) while in close contact with coworkers in the 2 weeks before your test

0	0	0	0	0
0	0	0	0	0
0	$\circ$			
		$\bigcirc$	$\circ$	$\circ$
$\bigcirc$	0	$\circ$	$\circ$	0
$\circ$	$\circ$	$\circ$	$\circ$	$\circ$
$\circ$	$\circ$	$\circ$	$\circ$	$\circ$
$\circ$	$\circ$	$\circ$	$\circ$	$\circ$
0	$\circ$	$\circ$	$\circ$	0
	0			

### Display This Question:

If In the 2 weeks before your test, were you in extended close contact (within 2 metres for 15 minut... = Yes

Q2.25 Were you made aware that a coworker you may have come in contact with at work tested positive for COVID-19 in the 2 weeks before your test?

○ Yes (1)			
O No (2)			

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Q84 Does your job involve contact equipment that patients may have	t with patients, their materials or belongings, or medical come in contact with?
○ Yes (1)	
O No (2)	
Page Break —	

End of Block: 2. Testing context
Start of Block: 3. Adherence to IPC
Display This Question:  If Does your job involve contact with patients, their materials or belongings, or medical equipment = Yes
Q3.1 Adherence to infection prevention and control (IPC) measures (except otherwise stated, these questions refer to the 2 weeks before your test date)
Display This Question:
If Does your job involve contact with patients, their materials or belongings, or medical equipment = Yes
Q3.2 In the two weeks before your test, did you know what routine (standard) IPC practices were?
○ Yes (1)
O No (2)
O Not sure / can't remember (3)
Display This Question:  If Does your job involve contact with patients, their materials or belongings, or medical equipment = Yes
Q3.3 Did you receive any IPC training in the three months before your test?
○ Yes (1)
O No (2)
O Not sure / can't remember (3)

# Display This Question: If Did you receive any IPC training in the three months before your test? = Yes And Does your job involve contact with patients, their materials or belongings, or medical equipment... = Yes Q3.4 What was the date of your last IPC training? I know the exact date (yyyy/mm/dd) (1) Uncertain of the exact date, but less than 1 month before (2) O Uncertain of the exact date, but more than 1 month before (3) Display This Question: If Did you receive any IPC training in the three months before your test? = Yes And Does your job involve contact with patients, their materials or belongings, or medical equipment... = Yes Q3.5 In the three month before your test date, how much cumulative IPC training (routine practices and additional precautions) did you receive? Less than 2 hours (1)

## Display This Question:

More than 2 hours (2)

If Did you receive any IPC training in the three months before your test? = Yes

And Does your job involve contact with patients, their materials or belongings, or medical equipment... = Yes

Q3.6 Was the IPC training on personal protective equipment (PPE) carried out remotely (e.g. presentations only, e-learning) or were practical sessions on standard precautions/additional precautions conducted?
Only remotely / online (1)
Only practical (2)
O Both (3)
Page Break ————————————————————————————————————

Display This Question:
If Does your job involve contact with patients, their materials or belongings, or medical equipment =
Yes
Q3.7 Before your COVID-19 test, did you know the recommended moments for hand hygiene in health care?
O Yes (1)
O No (2)
O Not sure / can't remember (3)
Display This Question:
If Before your COVID-19 test, did you know the recommended moments for hand hygiene in health care? = Yes
And Does your job involve contact with patients, their materials or belongings, or medical equipment = Yes
Q3.8 Did you follow these recommended hand hygiene practices?
O Always (1)
O Most of the time (2)
Occasionally (3)
O Rarely (4)
O Never (5)
Page Break

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If Does your job involve contact with patients, their materials or belongings, or medical equipment... = Yes

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U.3 9 Before V	vour test date.	were voi	i iisina	alcohol-based	nand ru	n or soar	and water.
QU.U DUIDIO	your toot auto,	, wold you	4 401119	alcoller bacca	nana na	D OI COUP	and water.

	Always (1)	Most of the time (2)	Occasionally (3)	Rarely (4)	Never (5)
Before touching a patient? (1)	0	0	0	0	0
Before cleaning/aseptic procedures? (2)	0	$\circ$	0	0	0
After (risk of) body fluid exposure? (3)	0	0	$\circ$	$\circ$	0
After touching a patient? (4)	0	$\circ$	$\circ$	$\circ$	$\circ$
After touching a patient's surroundings? (5)	0	0	0	0	0

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nco	$\alpha u$	Inc	/ NI I/	estion:

O Yes (1)

If Does your job involve contact with patients, their materials or belongings, or medical equipment... = Yes

Q3.10 Was alcohol-based hand rub available at point of care?

( )	
O No (2)	
Occasionally	(3)
O Not sure (4)	

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Displ	av i	HIS	Uи	COL	юн.

If Does your job involve contact with patients, their materials or belongings, or medical equipment... = ies



Q3.11 Please tick the box that best describes how you OFTEN used personal protective equipment (PPE) while encountering patients in the 2 weeks before your test.

·	Always (1)	Most of the time (2)	Occasionally (3)	Rarely (4)	Never (5)
Medical / surgical masks (1)	0	0	0	0	0
Respirator (N95, FFP2 or equivalent) (2)	0	0	$\circ$	0	0
Face shield or goggles / glasses (3)	0	0	$\circ$	0	0
Gloves (4)	$\circ$	$\circ$	$\circ$	$\bigcirc$	$\circ$
Gowns and coverall (5)	0	$\circ$	0	$\circ$	0
Head cover (6)	$\circ$	$\circ$	$\circ$	$\circ$	$\circ$
Shoe covers (7)	$\circ$	$\circ$	$\circ$	$\circ$	0
Other (optional; specify) (8)	$\circ$	0	$\circ$	0	$\circ$

# Display This Question:

If Does your job involve contact with patients, their materials or belongings, or medical equipment... = es

Q3.12 Did you experience difficulty getting PPE in the 2 weeks before your test?
○ Yes (1)
O No (2)
Display This Question:
If Did you experience difficulty getting PPE in the 2 weeks before your test? = Yes
And Does your job involve contact with patients, their materials or belongings, or medical equipment = Yes
Q3.13 Which PPE did you experience difficulty getting? (Select all that apply)
Medical / surgical masks (1)
Face shields or goggles / glasses (2)
Gloves (3)
Gowns or coveralls (4)
Head covers (5)
Respirators (e.g. N95, FFP2 or equivalent) (6)
Shoe covers (7)
Other (specify) (8)
Display This Question:  If Does your job involve contact with patients, their materials or belongings, or medical equipment =

Q3.14 Did you supply?	u reuse any PPE in the 2 weeks before your test on account of an inadequate
O Yes (	1)
○ No (2	)
Display This Q	uestion:
	reuse any PPE in the 2 weeks before your test on account of an inadequate supply? = Yes
And Does equipment =	your job involve contact with patients, their materials or belongings, or medical Yes
Q3.15 Which	PPE did you reuse? (Select all that apply)
	Medical / surgical masks (1)
	Face shields or goggles / glasses (2)
	Gloves (3)
	Gowns or coveralls (4)
	Head covers (5)
	Respirators (e.g. N95, FFP2 or equivalent) (6)
	Shoe covers (7)
	Other (specify) (8)
Page Break	

End of Block: 3. Adherence to IPC

Start of Blocks	4. Exposures	to COVID	nationto
Start of Diock.	4. EXPOSUITS	TO COVID	palitilis

# Display This Question:

If Does your job involve contact with patients, their materials or belongings, or medical equipment... = Yes

Q4.1 In relation to your test date, when was your earliest exposure to a confirmed COVID-19 patient at work?

3 days or less before the test (1)	ne test (	before the test	3 days or less	
------------------------------------	-----------	-----------------	----------------	--

- 4 7 days before the test (2)
- 8 or more days before the test (3)
- I was not exposed to a known COVID-19 patient (4)

### Display This Question:

If In relation to your test date, when was your earliest exposure to a confirmed COVID-19 patient at... != I was not exposed to a known COVID-19 patient

And Does your job involve contact with patients, their materials or belongings, or medical equipment... = Yes



### Q4.2

Before your test date, how many COVID-19 patients were you exposed to during your occupational duties?

(An exact number or an estimated range is permissible)

## Display This Question:

If In relation to your test date, when was your earliest exposure to a confirmed COVID-19 patient at... != I was not exposed to a known COVID-19 patient

And Does your job involve contact with patients, their materials or belongings, or medical equipment... = Yes

Q4.3 Did you have close contact (within 2 metres) with the COVID-19 patient(s) since their admission?
○ Yes (1)
○ No (2)
O Unknown (3)
Display This Question:
If Did you have close contact (within 2 metres) with the COVID-19 patient(s) since their admission? = Yes
And Does your job involve contact with patients, their materials or belongings, or medical equipment = Yes
Q4.4 How many times (total) did you have close contact with the COVID-19 patient(s)?
○ < 10 times (1)
O 10 - 50 times (2)
○ > 50 times (3)
Display This Question:
If Did you have close contact (within 2 metres) with the COVID-19 patient(s) since their admission? = Yes
And Does your job involve contact with patients, their materials or belongings, or medical equipment = Yes
*
Q4.5 Please specify exactly how many times, if you can recall: (optional)
· · · · · · · · · · · · · · · · · · ·

Display This Question:
If Did you have close contact (within 2 metres) with the COVID-19 patient(s) since their admission? = Yes
And Does your job involve contact with patients, their materials or belongings, or medical equipment = Yes
Q4.6 What was the duration of the longest of the close contacts?
O Less than 15 minutes (1)
○ More than 15 minutes (2)
O Unknown (3)
Display This Question:
If In relation to your test date, when was your earliest exposure to a confirmed COVID-19 patient at
!= I was not exposed to a known COVID-19 patient
And Does your job involve contact with patients, their materials or belongings, or medical equipment = Yes
Q4.7 Were you present for any aerosolizing procedures on a COVID-19 patient?
○ Yes (1)
○ No (2)
O Unknown (3)
Display This Question:
If Were you present for any aerosolizing procedures on a COVID-19 patient? = Yes
And Does your job involve contact with patients, their materials or belongings, or medical equipment = Yes

Q4.8 Which procedure(s)?					
Which procedure(s)? (Check all that apply)					
	Tracheal intubation (4)				
	Nebulizer treatment (7)				
	Open airway suctioning (8)				
	Collection of sputum (9)				
	Tracheostomy (10)				
	Bronchoscopy (11)				
	Cardiopulmonary resuscitation (CPR) (12)				
	Other (specify) (13)				
D: / T/: 0					
Display This Question:  If Were you present for any aerosolizing procedures on a COVID-19 patient? = Yes  And Does your job involve contact with patients, their materials or belongings, or medical equipment = Yes					
Q4.9 Did you wear PPE during the aerosolizing procedures?					
○ Yes (1)					
O No (2)	O No (2)				
O Unknown (3)					

# Display This Question:

If Did you wear PPE during the aerosolizing procedures? = Yes

And Does your job involve contact with patients, their materials or belongings, or medical equipment... = Yes

# Q4.10 What PPE was worn during the aerosolizing procedures? (Tick all that apply) Medical / surgical masks (1) Respirators (e.g. N95, FFP2 or equivalent) (2) Face shields or goggles / glasses (3) Gloves (4) Gowns or coveralls (5) Head covers (6) Shoe covers (7) Other (specify) (8)

Page Break ----

Display This Question:
If Does your job involve contact with patients, their materials or belongings, or medical equipment = Yes
Q4.11 If you wore a respirator at work in the 2 weeks before your COVID-19 test, was it fit tested?
○ Yes (1)
O No (2)
O Unknown (3)
O I did not wear a respirator in the 2 weeks before the COVID-19 test (4)
Display This Question:
If If you wore a respirator at work in the 2 weeks before your COVID-19 test, was it fit tested? = Yes
And Does your job involve contact with patients, their materials or belongings, or medical equipment = Yes
Q4.12 When was the fit testing done?
○ Within 2 years of your test date (1)
O More than 2 years before your test date (2)
O Don't know (3)
Page Break

Display This Q	uestion:
If Does yo Yes	ur job involve contact with patients, their materials or belongings, or medical equipment =
(Patient's mat	u have direct contact with the <b>patient's materials</b> in the 2 weeks before your test? terials include personal belongings, linen and medical equipment that the patient me into contact with)
O Yes (	1)
O No (2	)
OUnkno	own (3)
District This O	
Display This Q If Did you Yes	uestion: have direct contact with the patient's materials in the 2 weeks before your test? (Patien =
	your job involve contact with patients, their materials or belongings, or medical Yes
Q4.14 Which	patient materials did you have direct contact with? Tick all that apply:
	Personal items (2)
	Linens / clothes (3)
	Medical devices used on the patient (4)
(5)	Medical equipment connected to the patient (e.g. ventilator, infusion pump, etc.)
	Other (specify) (6)
Display This Q  If Did you	uestion: have direct contact with the patient's materials in the 2 weeks before your test? (Patien =
Yes	
And Does equipment =	your job involve contact with patients, their materials or belongings, or medical Yes

Q4.15 How many times during the period did you have direct contact with the patient's materials (total)?
○ < 10 times (1)
O 10 - 50 times (2)
○ > 50 times (3)
Display This Question:
If Did you have direct contact with the patient's materials in the 2 weeks before your test? (Patien = Yes
And Does your job involve contact with patients, their materials or belongings, or medical equipment = Yes
*
Q4.16 Please specify exactly how many times, if you can recall:(optional)
Display This Question:  If Did you have direct contact with the nation's materials in the 2 weeks before your test? (Patien =
If Did you have direct contact with the patient's materials in the 2 weeks before your test? (Patien = Yes
And Does your job involve contact with patients, their materials or belongings, or medical equipment = Yes
Q4.17 Did you come into contact with the patient's body fluids via the patient's materials?
○ Yes (1)
O No (2)
O Unknown (3)
Display This Question:
If Did you come into contact with the patient's body fluids via the patient's materials? = Yes  And Does your job involve contact with patients, their materials or belongings, or medical equipment = Yes

Q4.18 Which	body fluids:
	Blood (13)
	Vomit (12)
	Urine (11)
	Stool (7)
	Mucus from the nose or lungs (8)
	Sweat (9)
	Breast milk (4)
	Other (specify) (14)
Display This Q	
If Did you Yes	have direct contact with the patient's materials in the 2 weeks before your test? (Patien =
	your job involve contact with patients, their materials or belongings, or medical Yes
*	

Q4.19 Please select which most accurately apply to your PPE while handling patient's materials:

Always (1)	Most of the time (2)	Occasionally (3)	Rarely (4)	Never (5)
0	0	0	0	0
0	0	0	$\circ$	0
$\circ$	0	$\circ$	$\circ$	0
$\circ$	$\circ$	$\circ$	$\circ$	$\circ$
$\circ$	$\circ$	$\circ$	$\circ$	$\circ$
$\circ$	$\circ$	$\circ$	$\circ$	$\circ$
$\circ$	$\circ$	$\circ$	$\circ$	0
0	0	0	$\circ$	$\circ$

Version 3, Jan. 28, 2021, H20-02517

Disp	play This Qu	uestion:			
Voc		ur job involve contact with patients, their materials or belongings, or medical equipment =			
Yes Q4.	20 Did you	u have direct contact with the surfaces around the patient?			
	○ Yes (1)				
	O No (2)	)			
	O Unkno	own (3)			
Die	alov This O				
DIS	play This Qu If Did you l	nestion:  have direct contact with the surfaces around the patient? = Yes			
	And Does	your job involve contact with patients, their materials or belongings, or medical			
equ	ipment =	Yes			
Q4.21 Which surfaces did you have direct contact with?					
		Bed (1)			
		Bathroom (2)			
		Ward corridor (3)			
		Patient table (4)			
		Bedside table (5)			
		Dining table (6)			
		Medical gas panel (7)			
		Other (specify) (8)			

# Display This Question:

If Did you have direct contact with the surfaces around the patient? = Yes

And Does your job involve contact with patients, their materials or belongings, or medical equipment... = Yes

Q4.22 Approximately how many times in the 2 weeks before your test did you make such contact in total?

- < 10 times (1)</p>
- 10 50 times (2)
- > 50 times (3)

# Display This Question:

If Did you have direct contact with the surfaces around the patient? = Yes

And Does your job involve contact with patients, their materials or belongings, or medical equipment... = Yes



Q4.23 Please specify exactly how many times, if you can recall:(optional)

# Display This Question:

If Did you have direct contact with the surfaces around the patient? = Yes

And Does your job involve contact with patients, their materials or belongings, or medical equipment... = Yes



Q4.24 Please select which most accurately describes your PPE use while making direct contact with the surfaces around the patient

	Always (1)	Most of the time (2)	Occasionally (3)	Rarely (4)	Never (5)
Medical / surgical masks (1)	0	0	0	0	0
Respirator (N95, FFP2 or equivalent) (2)	0	0	0	0	0
Face shield or goggles / glasses (3)	$\circ$	0	$\circ$	0	0
Gloves (4)	$\circ$	$\circ$	$\circ$	$\bigcirc$	$\circ$
Gowns and coverall (5)	$\circ$	$\circ$	$\circ$	$\circ$	0
Head cover (6)	$\circ$	$\circ$	$\circ$	$\circ$	$\circ$
Shoe covers (7)	$\circ$	$\circ$	$\circ$	$\circ$	$\circ$
Other (optional; specify) (8)	0	0	0	0	0

End of Block: 4. Exposures to COVID patients

**Start of Block: 5. Health worker pre-existing conditions** 

Q5.1 Before y	our test date, did you have any underlying disease or pre-existing condition(s)?
	Pregnancy (1)
	Obesity (optional: specify BMI) (2)
	Cancer (3)
	Diabetes (4)
	HIV / other immune deficiency (5)
	Heart disease (6)
	Asthma (requiring medication) (7)
	Chronic lung disease (non-asthma) (8)
	Chronic liver disease (9)
	Chronic haematological disorder (10)
	Chronic kidney disease (11)
	Chronic neurological impairment / disease (12)
	Organ / bone marrow recipient (13)
	No (14)
	Unknown (15)
	Other (specify) (16)

<b>—</b> · · ·			$\sim$	
I)ieni	21/	I hie	( )116	estion:
וטכוע	av	HIIO	WU.	

If Before your test date, did you have any underlying disease or pre-existing condition(s)? = Pregnancy

Q5.2 Specify trimester of pregnancy:
O First (1)
O Second (2)
O Third (3)
O Unknown (4)
Q5.3 What was your smoking status at the time of your test?
O Current smoker (1)
O Past smoker (2)
O Never smoked (3)
Page Break

•	eceived the CO\				
O Yes (1)					
O No (2)					
if yes, date of fire Second (if applic					
	er a few short qu	uestions on your	e. You may subm experience with	•	
O Submit n	ow (1)				
O Continue	to additional qu	estions (2)			
End of Block: 5. Health worker pre-existing conditions					
Start of Block:	6. COVID-19 Ex	pereince			
Start of Block: Q6.1 How satisf					
			Neither satisfied nor dissatisfied (3)	Somewhat satisfied (4)	Very satisfied (5)
	fied were you wit Very dissatisfied	h: Somewhat dissatisfied	satisfied nor dissatisfied		•
Q6.1 How satisf	fied were you wit Very dissatisfied	h: Somewhat dissatisfied	satisfied nor dissatisfied		•

Q6.2 Any comments you want to share regarding your test experience or anything else? <i>(optional)</i>	
	-
	_
Page Break ————————————————————————————————————	

Q6.3 How would you describe how safe you feel regarding:					
	Very unsafe (1)	Somewhat unsafe (2)	Neither safe nor unsafe (3)	Somewhat safe (4)	Very safe (5)
contracting COVID-19 at work (1)	0	0	0	0	0
contracting COVID-19 in the community (2)	0	0	0	0	
Q6.4 Any comments (optional)	you want to shar	re regarding you	r safety from CO	VID-19 or anyth	ing else?
End of Block:	6. COVID-19 Ex	pereince			

# APPENDIX 1: TO ASSESS THE STATE OF OHS IN SOUTH AFRICAN HOSPITALS IN LINE SOUTH AFRICAN OCCUPATIONAL HEALTH LAWS DURING THE COVID-19 PANDEMIC, 2020

# PART A

Ι.	Name of person completing the questionnaire.
2.	Designation of person:
3.	Cell number
4.	Landline number
5.	e-mail address
6.	Hospital

# Hospital information

7.	Is there a hospital occupational health and safety policy?
	Mark only one oval.
	Yes
	◯ No
8.	Is there a hospital occupational health and safety policy standard operating procedure?
	Mark only one oval.
	Yes
	○ No
9.	Does the hospital have an agreement with organised labour or a nomination or section procedure for health and safety representatives?
	Mark only one oval.
	Yes
	◯ No
10.	Does the hospital have an adequate number of health and safety representatives to employees?
	Mark only one oval.
	Yes
	○ No
11.	If not what is the ratio?
12.	Do health and Safety Representative have appointment letter?
	Mark only one oval.
	Yes
	○ No

13.	Have the Health and Safety Representative been trained?
	Mark only one oval.
	Yes
	○ No
14.	What percentage of health and safety representatives have been trained?
15.	Is there a health and safety committee appointed in the hospital?
	Mark only one oval.
	Yes
	◯ No
۱6.	Are there at least three monthly Health and safety committee meetings (see minutes)?
	Mark only one oval.
	Yes
	◯ No
۱7.	Is there chairperson of the health and safety committee appointed in writing?
	Mark only one oval.
	Yes
	No
18.	Does the hospital have a Health Risk Assessment in the last 2 years?
	Mark only one oval.
	Yes
	No

19. Was the Health Risk Assessment amended to include Covid-19

	Mark only one oval.			
	Yes			
	No			
20.	Proof of evidence (re	port) of t	he health risk assessment?	
	Mark only one oval.			
	Yes			
	No			
21.	Is the health risk assess	sment app	proved by the following?	
	Hospital CEO		Health and safety Committee	
22.	Are there summaries of Mark only one oval.		h risk assessment in each working are	a?
	Yes No			
23.	Are there Occupational	Risk Expo	osure Profiles for different categories j	ob profiles?
	Mark only one oval.			
	Yes			
	No			
24.	Is there an active medic	cal surveill	ance programme at the hospital?	
	Mark only one oval.			
	Yes			
	No			

25.	What is the proportion of workers that have had a baseline medical examination?
	Mark only one oval.
	Yes
	No
26.	Has the hospital conducted individual risk assessment to identify Covid-19 vulnerable workers?
	Mark only one oval.
	Yes
	◯ No
27.	Are workers HWs screened for COVID-19 related symptoms before each shift?
	Mark only one oval.
	Yes
	○ No
28.	To whom does the occupational health department report to in the organogram?
29.	Did the HWs receive training on how to protect themselves from occupational hazard?
	Mark only one
	Yes
	◯ No
	Partially

30.	What was the nature of the training?
	Tick all that apply.
	☐ In person training session ☐ Communication via electronic ☐ media pamphlets and posters
	Other:
31.	Was any training conducted on the Regulations for Hazardous Biological Agents during the last 12 months?
	Mark only one oval.
	Yes
	◯ No
32.	Proof of evidence that training was done.
	Mark only one oval.
	Yes
	◯ No
33.	Was there any recent training on hospital infection prevention and control relevant to COVD-19 control?
	Mark only one oval.
	Yes
	◯ No
34.	Frequency of communication from the hospital OHS / IPC concerning COVID-19?
	Mark only one oval.
	Daily
	Weekly
	Othor

35.	Indicate the frequency surfaces are cleaned in the different Departments.
	Mark only one oval.
	Every hour
	Every 2 – 4 hours
	Every 4 – 6 hours
	Every 6 - 8 hours
	Weekly
	None of the above
	Other:
36.	Indicate the type of surfaces cleaned in the Departments.
37.	Are the windows open during the audit?
	Mark only one oval.
	Yes
	◯ No
38.	Are the doors open during the audit?
	Mark only one oval.
	Yes
	◯ No

39.	If not, are there functional air conditioners in place (Split units, Heating Air conditioning Ventilation System)
40.	Does the hospital have mechanical ventilation system?
	Mark only one oval.
	Yes
	No
41.	Is the mechanical ventilation system functional ?
	Mark only one oval.
	Yes
	○ No
42.	What type of PPE is provided in the hospital i.e. is a system for allocating PPE?
43.	Are there different sizes of PPE available?
44.	Is HWs trained to perform a fit test after donning the respirator?
	Mark only one oval.
	Yes
	No
45.	Are health workers trained on donning and doffing of PPE?
	Mark only one oval.
	Yes
	◯ No

46.	Is the respirator fit testing programme in the hospital?
	Mark only one oval.
	Yes
	No

### **PART B**

# How the semi-structured walk-through survey is conducted:

- 1. This section is driven by the HealthWISE Tool of the World Health Organization (WHO) and the International Labour Organization (ILO). Health workers (HWs) in some of the health facilities and or hospitals in the Provincial Departments of Health (PDoH) have been trained on a basic methodology for conducting a walk-through survey in the areas where they work and observe the working environment for biological hazards. This is then followed a short working discussion on what they can do to improve the working environment without engaging OHS professionals or even external experts.
- 2. The procedure for this walk-through is as follows:
  - i. Walkthrough team (Researchers, provincial OHS coordinator, health facility OHS coordinator, and one person from the area (e.g. casualty) being assessed);
  - ii. Before entering the area, the team is offered surgical masks ONLY as personal protective equipment (PPE), and they use hand sanitizer on entry of the area walkthrough survey;
  - iii. The four walk across the area (maintaining social distancing) and look & observe without any discussion while in the area (casualty);
  - iv. On exit the group again uses the hand sanitizers to clean their hands;
  - v. The group then finds an open area without activity to then have a discussion on what they have observed and what immediate recommendation, and what might require further discussion with health facility management that the hospital OHS coordinator will take to management;
    - 1. In one of the facilities visited already the research team had identified that in one casualty there were no measures in place to prevent COVID-19 for patients and HWs alike;
    - 2. This was identified during the walk-through survey around 16h30, after some responsible staff members had left;
    - 3. The research team then immediately recommended that the responsible persons be called back to put measures in place;

- 4. That the walk-through team including the researchers stay and put the urgent measures to protect both the patients and HWs in place that very evening;
- 5. This exercise took an extra 2.5 hours and all were relieved afterwards
- vi. At the discussion each person writes their own notes for discussion with the hospital OHS coordinator expected to implement the discussion working with the ward managers and hospital management as per the guidelines of the principles of the WHO/ILO HealthWISE Tool
- vii. It must be noted that the researcher / academic support is not going to be available for all health facilities and the Provincial OHS coordinator is expected to learn from the walk-through so they can escalate the service to other health facilities within their PDoH;
- viii. All the above have already happened in at least one facility in Gauteng, Mpumalanga, and North West PDoH.

#### Areas to be visited

<u>En</u>	trance (	gates (pedestrian and cars)
1.	Ventila	ation
	Is it ad	equate OR not adequate? Elaborate below
2.	Admin	istrative controls
	a.	Are patients social distancing?
	b.	Is staff social distancing?
	C.	Are there markings for social distancing?
	d.	Is furniture positioned for social distancing?
	e.	Are the posters or information leaflets about COVID-19?
	f.	Is there an area with water and soap to clean hands?
	g.	Are there hand sanitizers in all entrances and exit points?
	h.	Is waste properly segregated?

i. Are COVID-19 waste management boxes or even leaflets j. Any other observation 3. Personal Protective equipment (PPE) a. What PPE are staff in this area wearing? b. Are they wearing PPE correctly c. Is staff wearing their home clothes d. Do you think there is adequate supply of PPE **Corridors and passages** 1. Ventilation Is it adequate OR not adequate? Elaborate below 2. Administrative controls a. Are patients social distancing? b. Is staff social distancing? c. Are there markings for social distancing? d. Is furniture positioned for social distancing?

	e.	Are the posters or information leaflets about COVID-19?
	f.	Is there an area with water and soap to clean hands?
	g.	Are there hand sanitizers in all entrances and exit points?
	h.	Is waste properly segregated?
	i.	Are COVID-19 waste management boxes or even leaflets
	j.	Any other observation
3.	Persor	nal Protective equipment (PPE)
	a.	What PPE are staff in this area wearing?
	b.	Are they wearing PPE correctly
	C.	Is staff wearing their home clothes
	d.	Do you think there is adequate supply of PPE
<u>Cas</u>	<u>sualty</u>	
1.	Ventila	ation
	Is it ad	equate OR not adequate? Elaborate below

2.	Admini	Administrative controls			
	a.	Are patients social distancing?			
	b.	Is staff social distancing?			
	C	Are there markings for social distancing?			
	0.	The there markings for social distancing:			
	d.	Is furniture positioned for social distancing?			
	e.	Are the posters or information leaflets about COVID-19?			
	f.	Is there an area with water and soap to clean hands?			
	a	Are there hand sanitizers in all entrances and exit points?			
	g.	Are there hand samuzers in all entrances and exit points:			
	h.	Is waste properly segregated?			
	i.	Are COVID-19 waste management boxes or even leaflets			
	j.	Any other observation			

3. Personal Protective equipment (PPE)

	a.	What PPE are staff in this area wearing?
	b.	Are they wearing PPE correctly
	C.	Is staff wearing their home clothes
	d.	Do you think there is adequate supply of PPE
<u>OP</u> 1.	Ventila	ation lequate OR not adequate? Elaborate below
2.		istrative controls Are patients social distancing?
	b.	Is staff social distancing?
	C.	Are there markings for social distancing?
	d.	Is furniture positioned for social distancing?
	e.	Are the posters or information leaflets about COVID-19?

	h.	Is waste properly segregated?
	i.	Are COVID-19 waste management boxes or even leaflets
	j.	Any other observation
3.		nal Protective equipment (PPE) What PPE are staff in this area wearing?
	b.	Are they wearing PPE correctly
	C.	Is staff wearing their home clothes
	d.	Do you think there is adequate supply of PPE
co	VID-19	Persons Under Investigation or Treatment area (isolation)
1.	Ventila	ation
	Is it ad	equate OR not adequate? Elaborate below
2.		istrative controls Are patients social distancing?

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f. Is there an area with water and soap to clean hands?

g. Are there hand sanitizers in all entrances and exit points?

	b.	Is staff social distancing?
	C.	Are there markings for social distancing?
	d.	Is furniture positioned for social distancing?
	e.	Are the posters or information leaflets about COVID-19?
	f.	Is there an area with water and soap to clean hands?
	g.	Are there hand sanitizers in all entrances and exit points?
	h.	Is waste properly segregated?
	i.	Are COVID-19 waste management boxes or even leaflets
	j.	Any other observation
3.	Persor	nal Protective equipment (PPE)
	a.	What PPE are staff in this area wearing?
	b.	Are they wearing PPE correctly

- c. Is staff wearing their home clothes
- d. Do you think there is adequate supply of PPE

# **■** Data Dictionary Codebook

#	Variable / Field Name	Field Label Field Note	Field Attributes (Field Type, Validation, Choices, Calculations, etc.)
nstrum	ent: COVID-19 SURVEILLA	ANCE & HEALTH CARE WORKER STUDY (covid19_sur	veillance_health_care_worker_study)
1	[chs_s1recordid]	Section Header: This section is about COVID-19  Record ID section 1  Automatic record numbering	text Custom alignment: RH
2	[chs_studyinforecordid]	Record ID Assign ID to participant starting CHS followed by 3 digits	text, Required
3	[chs_studyinfodaytime]	Please provide day and time you are completing this section	text (datetime_dmy), Required
	[studyinfor]	Study title: OHASIS COVID-19 surveillance Use of Information Systems, the experience of COVID-19 and vaccine uptake and hesitancy Dear NHLS Staff member We, NIOH and the Health and Safety Department are researching your COVID-19 pandemic experiences at work. Research is a process used in seeking new knowledge. In this study, we want to learn about your use of OHASIS during COVID and if you had a COVID-19 infection and your experiences. This information will help us to evaluate OHASIS and support staff in the NHLS. We are inviting you to take part in this research study What is involved in the study? This could include but would not necessarily be limited to: This is an electronic anonymous (you will not add your name or employee number) survey. In the second part of the study, your confidential incident data from The Occupational Health and Safety Information System (OHASIS) will be analysed anonymously. The survey will start in February 2022 and end once sufficient participants have joined You will need to complete the survey on your computer by answering all the questions. This should take 15 minutes. A link to the questionnaire will be emailed to you and you will complete the survey online implies that you consent to the study. The survey will ask about your interactions with OHASIS and your safety behaviours. Some information will also be collected about your COVID-19 experiences and your COVID-19 vaccination reasons. Risks of being involved in the study: There are no clear risks in participating in this survey If you have questions about COVID-19 please call the staff hotline 011 386 6131. If you need other support please contact the EWP provider Metropolitan Health SMS 083 450 0508 or Email: ewp@metropolitanhealth. Cova import please contact the EWP provider Metropolitan health SMS 083 450 oso of benefits to which you are otherwise entitled; there is no r	descriptive

name or ID number will be collected. This will impact the deletion of survey responses if you wish to withdraw from the study. For further information, please contact Kerry Wilson at kerryw@nioh.ac.za or call 0117126422 Outputs The study will produce peer-reviewed publications, these may be accessed on the NIOH website once published. A group summary of results for all staff will be published in the NHLS Labrap magazine once the study is completed. This study has been approved by the Human Research Ethics Committee (Medical) of the University of the Witwatersrand, Johannesburg (HREC). A principal function of this Committee is to safeguard the rights and dignity of all human subjects who agree to participate in a research project and the integrity of the research. If you have any concerns over the way the study is being conducted, please contact the Chairperson of this Committee who is Professor Clement Penny, who may be contacted on telephone number 011 717 2301, or by e-mail at Clement.Penny@wits.ac.za. The telephone numbers for the Committee secretariat are 011 717 2700/1234 and the e-mail addresses are Zanele.Ndlovu@wits.ac.za and Rhulani.Mukansi@wits.ac.za Thank you for reading this Study Information Sheet. November 2021 POPIA considerations This study will use your personal information (PI) including, your age, your education, your employment history, your home language, and medical information relevant to COVID-19. Only the required information will be collected. The responsible party is the National Institute for Occupational Health, a division of the National Health Laboratory Services (NHLS). The purpose for which Your PI is Being Collected: The study collects your PI for research purposes, to describe and evaluate the surveillance and health and safety at NHLS during COVID along with your experiences of COVID-19 infection. Ethics clearance has been sought to ensure there are safeguards in place to protect you. Your PI is also collected to allow us to comply with relevant legislation. The study team will work to ensure your correct and complete PL is collected. How the study will use your PL include the following: To research COVID-19 Surveillance and health and Safety; To manage our data and combine information from different sources; To comply with legal requirements and obligations imposed on us by law, and To ensure that our research is conducted rigorously and scientifically. The collection and processing of your PI will be conducted only with your voluntary consent, upon disclosure of the purposes for which such PI is processed. However, your PI will also be processed if the study is required to do so to comply with obligations imposed on it by law. Access to your PI is limited to the study team who need to know such information, to conduct the research. Your PI will not be shared unless required by Law. Unidentifiable data will be shared as group data in reports and publications. Your data will be stored securely in a digital format - from the collection on REDCap to storage on password-secured computers that undergo regular updates. Data will be stored on a secure server to maintain the integrity of your data. We shall delete or otherwise de-identify your personal information after the minimum storage periods required for research and statutory record-keeping periods have expired. As a study subject, you have a number of rights concerning your Pl. You can, amongst others: require the study company to confirm what PI we have stored; require us to amend incorrect or incomplete PI; object to the, or require the company to stop processing your PI, for example where the processing of your PI is no longer necessary; require us to erase your PI; where our processing of your PI is based solely on your consent, you may withdraw that consent; or receive from us the PI we hold about you, which you have provided to us, including for the purpose of you transmitting that PI to another responsible party. You have the right to complain to the Information Regulator if aggrieved. as your PI will be collected anonymously fulfilling these obligations will depend on your cooperation. If you would like access to your PI please contact the NHLS Information Officer the CIO Mr Sibongiseni Hlongwane Seni.Hlongwane@nhls.ac.za

	5	[chs_consent]	PARTICIPANT CONSENT on REDCap 1. I have been given a Participant Information Sheet which explains the survey and processes involved in this study, 2. I was given time to read it, or had it read to me, in a language I understand;3. I was given contact details to ask any questions 4. I believe I understand why the study is being conducted and what the intended outcomes will be;5. I understand that there will be no immediate benefit to me, should I agree to participate, nor will I receive any payment; conversely, participation will not cost me anything but my time;6. I understand that, even if I initially consent to take part in the study, I may subsequently withdraw at any time and would not be required to give any reasons; if that happened, any data collected about me for the purposes of the study would immediately be destroyed, unless I give consent for it to be retained7. I have been given a range of contact details, listed below. If I require further information or become concerned about any aspect of this study I am free to speak to any of these contacts. Contact details:Kerry Wilson, Principal Investigator, telephone no. 0117126422, or by e-mail at Kerryw@nioh.ac.za, Professor CB Penny, Chairperson of the Human Research Ethics Committee (Medical) at the University of Witwatersrand, on telephone no. 011 717 2301, or by e-mail at Clement.Penny@wits.ac.za. Ms. Z Ndlovu or Mr Rhulani Mkansi, Committee Secretariat, telephone nos.: 011 717 2700 or 1234, or by e-mail at: Zanele.Ndlovu@wits.ac.za or Rhulani.Mkansi@wits.ac.za	descriptive
	6	[chs_consented]	Consent	yesno, Required
			MUST RESPOND	1 Yes
				0 No
_				Custom alignment: RH
	7	[chs_nameinterviewer]	Name of the interviewer, if interviewed  NAME IN CAPITAL LETTERS	text Custom alignment: RH
	8	[chs_dtssone]	Section Header: Section 1: Information About You  Please provide day and time you are completing this section 1: Information about you	text (date_dmy), Required Custom alignment: LH
	9	[nstructns]	OHASIS COVID-19 HEALTH & SAFETY QUESTIONNAIRE All information you provide will be anonymous and only a group report relayed to all NHLS. Please note that by completing this questionnaire you are voluntarily agreeing to participate in this research study. Your data will be treated confidentially at all times. Processing of your data will comply with POPI Act regulations You may withdraw from this study at any moment during the completion of the questionnaire	descriptive
	10	[subregion]	1.1 Which sub-region do you work in?	checkbox, Required
			Choose ONLY one	1 subregion1 Academic Complex
				2 subregion2 Alfred Nzo & Joe Gqabi
				3 subregion3 Buffalo City & Amathole
				4 subregion4 Capricon
				5 subregion5 Charlotte Maxeke Academic
				6 subregion6 Chris Hani Baragwanath Academic
				7 subregion7 lbhayi
				8 subregion8 Corporate
				9 subregion9 Dr George Mukhari Academic
				10 subregion10 Eastern Cape - Management
				and Admin
				11 subregion11 Ehlanzeni
				12 subregion12 Ekurhuleni Tshwane
				13 subregion13 EThekwini
				14 subregion14 Free State
				15 subregion15 Free State and North West
				16 subregion16 Management and Admin
1	I	I	I	

				<u> </u>
				17 subregion17 Gauteng Management and Administration
				18 subregion18 Gert Sibande and Nkangala
				19 subregion19 Groote Schuur Academic
				20 subregion20 Harry Gwala-Ugu
				21 subregion21 Joburg Sedibeng West Rand
				22 subregion22 KZN -Management and Admin
				23 subregion23 Lembe-Thungulu
				24 subregion24 Limpopo and Mpumalanga
				25 subregion25 Management and Admin
				26 subregion26 Maju-Mzinyathi
				27 subregion27 Mgungundlovu-Thukela
				28 subregion28 Nelson Mandela Academic Lab
				29 subregion29 Nelson Mandela Bay & Sarah
				30 subregion30 Baartman
				31 subregion31 NICD
				32 subregion32 NIOH
				33 subregion33 North West
				34 subregion34 Northern Cape
				35 subregion35 Northern -Limpopo East
				36 subregion36 Northern Rekopane
				37 subregion37 OR Tambo & Chris Hani
				38 subregion38 SAVP
				39 subregion39 Sekhukhune - Waterberg
				40 subregion40 Southern Gauteng
				41 subregion41 Tshwane Academic
				42 subregion42 Tygerberg Academic
				43 subregion43 Umkhanyazulu
				44 subregion44 Universitas
				45 subregion45 Vhembe - Mopani District
				46 subregion46 Western Cape
				47 subregion47 Western and Northern Cape
				48 subregion48 Management and Admin
	11	[ruralurban]	1.2 In your opinion are you based in a rural or urban	radio, Required
			facility	1 Rural
			Choose ONLY one	2 Urban
				Custom alignment: RH
$\square$	12	[pplebuilding]	1.3 How many people work in your building / facility	radio, Required
			Choose ONE	1 1-10
				2 11-50
				3 51-200
				4 201+
				Custom alignment: RH
	13	[ageyrs]	1.4 What is your age in years? Age between 15 - 100 years	text (number, Min: 15, Max: 100), Required Custom alignment: RH
	14	[sex]	1.5 What was your sex at birth?	radio, Required
			Choose ONLY one	1 Female
				2 Male
				Custom alignment: RH
ш				

	15	[genderid]	1.5 What gender do you identify with?	adio, Required	
			Choose ONLY one	1 Woman	
				2 Man	
				3 Other	
				4 Choose not to say	
				ustom alignment: LH	
	16	[race]	1.6 What is your race?	adio, Required	
			Choose ONLY one	1 Asian	
				2 Black	
				3 Coloured	
				4 Indian	
				5 White	
				6 Other	
				iustom alignment: LH	
	17	[chs_soneotherrace]	If other, specify	ext	
		Show the field ONLY if: [race] = '6'			
	18	[homelang]	1.7 What is your home language?	adio, Required	
			Choose ONLY one	1 Sepedi	
				2 Sesotho	
				3 Setswana	
				4 siSwati	
				5 Tshivenda	
				6 Xitsonga	
				7 Afrikaans	
				8 English	
				9 isiNdebele	
				10 isiXhosa	
				11 isiZulu	
				12 Other	
	10		If all and an arrange and if		
	19	[chs_soneotherlanguage]	If other language, specify	ext	
		Show the field ONLY if: [homelang] = '12'			
	20	[jobcategory]	1.8 Which category would your job best fit in?	adio, Required	
			Choose ONLY one	1 Medical Technician	
				2 Medical Technologist	
				3 Clerk (Laboratory-based)	
				4 Laboratory Manager	
				5 Intern / Student	
				6 Laboratory assistant	
				7 Admin including HR and finance // laboratory)	Clerk (Non-
				8 Management staff non-laboratory	,
				9 Driver/messenger	
				10 Phlebotomist	
				11 General worker including cleaners staff & workshop	and security
				12 Medical Scientist	
				13 Medical Specialist	
				14 Pathologist	
				15 Registrar	
				16 Nurse	
				17 IT	
				18 Other	
1	i l		1		

21	[chs_soneotherjobcatego]	Other, specify which job category	text
	Show the field ONLY if: [jobcategory] = '18'		
22	[jobexpyears]	1.9.b How many years of experience do you have (in total for your current speciality)?	radio, Required  1 0 to < 2 years 2 > 2 - 8 years 3 > 8 - 14 years 4 14+ years  Custom alignment: RH
23	[wkdutieschange]	1.10 Did your work duties change during the pandemic?	yesno, Required  1 Yes  0 No  Custom alignment: RH
24	[howchange]	1.11 If so, how did they change? Choose ONLY ONE	radio, Required  1 More work  2 Less work  3 Different tasks  4 Moved work location  5 Other  Custom alignment: LH
25	[chs_soneotherchanges] Show the field ONLY if: [howchange] = '5'	If other, specify	text Custom alignment: LH
26	[stresshome]	1.11a How often do you experience stress at home Choose ONLY ONE	radio, Required  1 Most of the time 2 Sometimes 3 Rarely 4 Never 5 Don't know (DK)  Custom alignment: LH
27	[stresswork]	1.11b How often do you experience stress at work Choose ONLY ONE	radio, Required  1 Most of the time 2 Sometimes 3 Rarely 4 Never 5 Don't know (DK)  Custom alignment: LH
28	[chs_sonetrachespains]	Section Header: 1.12 In the past 3 months how often have you been troubled by the following symptoms? Answer all questions.  1.12.a. Aches and pains	radio, Required  1 Not at all 2 Troubled a little 3 Troubled a lot  Custom alignment: RH
29	[chs_sonetrchestpain]	1.12.b. Chest pain or pounding or racing heart	radio, Required  1 Not at all  2 Troubled a little  3 Troubled a lot  Custom alignment: RH

30	[chs_sonetrtroublesleep]	1.12.c. Trouble sleeping?	radio, Required  1 Not at all 2 Troubled a little 3 Troubled a lot
31	[chs_sonetrtiredness]	1.12.d. Tiredness	Custom alignment: RH radio, Required 1 Not at all
			2 Troubled a little 3 Troubled a lot
32	[chs_sonetrheadaches]	1.12.e. Headaches or dizziness	Custom alignment: RH  radio, Required  1 Not at all 2 Troubled a little 3 Troubled a lot
33	[chs_sonetrmuscletension]	1.12.f. Muscle tension or jaw clenching	Custom alignment: RH  radio, Required  1 Not at all  2 Troubled a little  3 Troubled a lot  Custom alignment: RH
34	[chs_sonetrstomachdps]	1.12.h. Stomach or digestion problems	radio, Required  1 Not at all 2 Troubled a little 3 Troubled a lot  Custom alignment: RH
35	[chs_sonetrshortnessbreath]	1.12.i. Shortness of breath	radio, Required  1 Not at all 2 Troubled a little 3 Troubled a lot  Custom alignment: RH
36	[chs_sonetrinjuries]	1.12.j. Injuries	radio, Required  1 Not at all 2 Troubled a little 3 Troubled a lot  Custom alignment: RH
37	[chs_soneqwlqgoodremune]	Section Header: 1.13. Quality of Work Life Please tick the statement that best describe the quality of your work life in the past 12 months 1.13.A. My company provides good remuneration and benefits	radio, Required  1 Strongly agree  2 Agree  3 Neutral  4 Disagree  5 Strongly disagree  Custom alignment: LH
38	[chs_soneqwlqfairpolproc]	1.13.B. My company has fair policies and procedures	radio, Required  1 Strongly agree  2 Agree  3 Neutral  4 Disagree  5 Strongly disagree  Custom alignment: LH

39	[chs_soneqwlqgrowdev]	1.13.C. My company provides me with opportunities to grow and develop in my job	radio, Required  1 Strongly agree
		g. or and coreage many job	2 Agree
			3 Neutral
			4 Disagree
			5 Strongly disagree
			Custom alignment: LH
40	[chs_soneqwlqppmwrkhl]	1.13.D. My company's policies and procedures enable me to manage work and home life	radio, Required
		to manage norwana nome me	1 Strongly agree 2 Agree
			3 Neutral
			4 Disagree
			5 Strongly disagree
41	[-	1.13.E. Working relationships within the company are	Custom alignment: LH
41	[chs_soneqwlqwrgllygood]	generally good	radio, Required  1 Strongly agree
			2 Agree
			3 Neutral
			4 Disagree
			5 Strongly disagree
			Custom alignment: LH
42	[chs_soneqwlqsuffrs]	1.13.F. I have sufficient resources to be able to do my job	radio, Required
	200200000000000000000000000000000000000	,,,,,	1 Strongly agree
			2 Agree
			3 Neutral
			4 Disagree
			5 Strongly disagree
			Custom alignment: LH
43	[chs_soneqwlqfreedomtask]		radio, Required
		my tasks	1 Strongly agree
			2 Agree
			3 Neutral 4 Disagree
			4 Disagree 5 Strongly disagree
			3 Strongly disagree
			Custom alignment: LH
44	[chs_stwokhcontactshe]	Section Header: SECTION 2: Information about Workplace Health and Safety and experiences	radio, Required  1 Yes
		2.1 Do you know how to contact your Safety Health and	1 Yes 2 No
		Environment (SHE) Officer	3 Not sure
4-			Custom alignment: LH
45	[chs_stwokhcontactohn]	2.2 Do you know how to contact your Occupational Health Nurse?	radio, Required  1 Yes
			2 No
			3 Not sure
			Custom alignment: LH
46	[chs_stwocontacthsrep]	2.3 Do you know how to contact your Health and Safety	radio, Required
	[ senseoned census ep ]	Representative?	1 Yes
			2 No
			3 Not sure
			Custom alignment: LL
			Custom alignment: LH

47	[chs_stwoseenohasis]	2.4 Have you seen OHASIS on the NHLS intranet landing page	radio, Required  1 Yes 2 No 3 Not sure  Custom alignment: LH
48	[chs_stworcompleteohasis]	2.5 Do you regularly complete OHASIS COVID-19 screening?	yesno, Required  1 Yes 0 No  Custom alignment: RH
49	[chs_stwocohasisifyhow] Show the field ONLY if: [chs_stworcompleteohasis] = '1'	2.5.1 If so, how?	radio  1 On OHASIS  2 On paper  3 Both on paper and OHASIS  Custom alignment: LH
50	[chs_stwocohasisifnown]  Show the field ONLY if: [chs_stworcompleteohasis] = '0'	2.5.2 If No why not?	text Custom alignment: LH
51	[chs_stworeportinciddiswk]	2.6 Do you know that you need to report all incidents including diseases you think came from work exposures	radio, Required  1 Yes 2 No 3 Not sure  Custom alignment: LH
52	chs_sfwphwpinjillness]	2.7. If you were to experience a workplace injury or illness. What would happen?	radio, Required  1 I generally do not report it 2 I generally report it but usually nobody comes to investigate 3 I generally report it and it is usually promptly investigated, but then nothing is done to fix it 4 I generally report it and it is usually promptly investigated and resolved 5 N/A
53	[chs_stwokhreportwpio]	2.8 Do you know how to report a workplace incident, injury or disease including COVID-19 on OHASIS?	radio, Required  1 Yes 2 No 3 Not sure  Custom alignment: LH
54	[chs_stwousedcshotline]	2.9 Have you used the COVID-19 staff hotline	yesno, Required  1 Yes  0 No  Custom alignment: RH
55	[chs_stworeadnhlscvaccti]	2.10 Have you read the NHLS intranet-based COVID-19 Vaccination training and information	yesno, Required  1 Yes 0 No  Custom alignment: LH
56	[chs_stwoneedlesinjexpblood]	Section Header: 2B WORKPLACE INJURIES AND DISEASES 2.11 Did you have a needle stick/sharp injury or other unprotected exposure to blood or body fluids from January 2020 to now?	yesno, Required  1 Yes  0 No  Custom alignment: LH

57	[chs_stwoifyesinjexphmany] Show the field ONLY if: [chs_stwoneedlesinjexpbloo	2.11.1 If yes How many ?		text Custom alignment: RH		
58	d] = '1'  [chs_stwodateneedle]  Show the field ONLY if: [chs_stwoneedlesinjexpbloo d] = '1' and [chs_stwoifyesinje xphmany] > 1	2.11.2 What date did you have a needle stick or splash?		text (date_dmy) Custom alignment: RH		
59	[chs_stwootherdateinjury] Show the field ONLY if: [chs_stwoifyesinjexphmany] > 1	2.11.3 Which other date did you have the injury (ies)?		(date_dmy) tom alignment: RH		
60	[chs_stworeportedto]	2.11.4 If Yes to the above question, to whom did you report this?	che	ckbox, Required		
	Show the field ONLY if: [chs_stwoneedlesinjexpbloo	(CHOOSE ALL THAT APPLY) Check all boxes that apply	1	chs_stworeportedto1		ational n Service
	d] = '1'	Cireck uii boxes arac appiy	2	chs_stworeportedto2		urced service ler (Life Assist)
			3	chs_stworeportedto3	First A	id Service
			4	chs_stworeportedto4		n & Safety sentative
			5	chs_stworeportedto5	Collea	gue
			6	chs_stworeportedto6	Super	visor
			7	chs_stworeportedto7	Casua	lty
			8	chs_stworeportedto8	OHASI	IS
			9	chs_stworeportedto9	Other	
			10	chs_stworeportedto10	Not re	ported
61	[chs_stworeportedospecify] Show the field ONLY if: [chs_stworeportedto(9)] = '1'	If reported to Other, specify	text	text		
62	[chs_stworeasonsntreport] Show the field ONLY if: [chs_stworeportedto(10)] = '1'	2.11.5 If you have NOT reported your biological needle stick or splash, please describe the reasons:	text	text		
63	[chs_stwowrinjurypast12m]	2.12 Did you have a work-related injury in the last 12 months other than a needle stick?	1 2 3	radio, Required  1 Yes 2 No 3 Not sure  Custom alignment: LH		
64	[chs_stwoureportedtop12m]	2.13 If Yes, to whom did you report this?	che	ckbox, Required		
		(CHOOSE ALL THAT APPLY) Check all boxes that apply	1	chs_stwoureportedtop12m	11	Occupational Health Service
			2	chs_stwoureportedtop12m	n2	Outsourced service provider (Life Assist)
			3	chs_stwoureportedtop12m	13	First Aid Service
			4	chs_stwoureportedtop12n	n <u>     4      </u>	Health & Safety Representative
			5	chs_stwoureportedtop12m	n5	Colleague
			6	chs_stwoureportedtop12m	n6	Supervisor
			7	chs_stwoureportedtop12m	n7	Casualty
			8	chs_stwoureportedtop12m	n8	OHASIS
			9	chs_stwoureportedtop12m	19	Other
	1			chs_stwoureportedtop12m		

65	[chs_stwonotreportedp12mr] Show the field ONLY if: [chs_stwoureportedtop12m(1 0)] = '1'	2.13.1 If you have NOT reported please describe the reasons:	text
66	[chs_stwovaccinatedfor]	2.14 Have you been vaccinated for (CHOOSE ALL THAT APPLY) Check all boxes that apply	checkbox, Required  1 chs_stwovaccinatedfor1 Varicella (as a child)  2 chs_stwovaccinatedfor2 Influenza in 2021  3 chs_stwovaccinatedfor3 Hep B  4 chs_stwovaccinatedfor4 BCG 9 (as a child)  5 chs_stwovaccinatedfor5 MMR (as a child)  6 chs_stwovaccinatedfor6 TDap (tetanus, Diptheria, Pertussis, within past 10yrs)  7 chs_stwovaccinatedfor7 COVID-19
67	[chs_stwotestedtbxray]	2.14 a. Have you been tested (x-ray) for Tuberculosis (TB) at work?	yesno, Required  1 Yes 0 No  Custom alignment: LH
68	[chs_stwoifnottestedtbwhy] Show the field ONLY if: [chs_stwotestedtbxray] = '0'	2.14 b. If no why not	text Custom alignment: RH
69	[tbscreen]	14.c If your risk assessment indicates you need to screen regularly for Tuberculosis (TB) Do you?	radio  1 Self-screen on OHASIS every 3 months 2 Self-screen on OHASIS sometimes 3 Never screen 4 Screen but don't report if no symptoms  Custom alignment: LH
70	[chs_stwosuffertbatnhls]	2.15 Did you suffer from Tuberculosis (TB) during your employment at the NHLS	yesno, Required  1 Yes  0 No  Custom alignment: LH
71	[ chs_stwoiftbyreported ] Show the field ONLY if: [chs_stwosuffertbatnhls] = '1'	2.16 a. Did you report this	yesno 1 Yes 0 No  Custom alignment: RH
72	[tbreported] Show the field ONLY if: [chs_stwoiftbyreported]= '1'	2.16 b, Where or to whom did you report	radio  1 On OHASIS  2 To employee wellness  3 To your manager  4 To the OHS Nurse  5 Never reported  Custom alignment: RH
73	[chs_stwotbnhlsnoreprtwhy] Show the field ONLY if: [chs_stwoiftbyreported] = '0'	2.16 c. If no why not	text Custom alignment: RH
74	[chs_stwoiftbyyear] Show the field ONLY if: [chs_stwosuffertbatnhls] = '1'	2.17 What year did you have TB?  Year	text (date_dmy) Custom alignment: RH
75	[handhygiene]	Section Header: SECTION 3: TRAINING Please indicate all the training you have received at NHLS (e.g. talks, demonstrations, courses)(CHOOSE ALL THAT APPLY)  3 a. Hand hygiene	checkbox, Required  1 handhygiene1 I have NOT received training 2 handhygiene2 I have received training 3 handhygiene3 I would like more training

[chs_sthtdonningppe]	3 b. Donning (put on) of personal protective equipment (PPE) e.g. respirators, lab coats, gloves	radio, Required  1 I have NOT received training 2 I have received training 3 I would like more training
[chs_sthtdoffingppe]	3 c. Doffing (removing) of PPE	radio, Required  1 I have NOT received training 2 I have received training 3 I would like more training
[chs_thtcovidpreventt]	3 d. COVID-19 how to prevent transmission	radio, Required  1 I have NOT received training 2 I have received training 3 I would like more training
[chs_sthtneedlestickinjprev]	3 e. Needle-stick and sharps injury prevention	radio, Required  1 I have NOT received training 2 I have received training 3 I would like more training
[chs_sththivaidsprevention]	3 f. HIV/AIDS prevention	radio, Required  1 I have NOT received training 2 I have received training 3 I would like more training
[chs_sthtriskwastemgt]	3 g. Health care risk waste management	radio, Required  1 I have NOT received training 2 I have received training 3 I would like more training
[chs_sthtchemicalhazards]	3 h. Chemical hazards	radio, Required  1 I have NOT received training 2 I have received training 3 I would like more training
[chs_sthtemergencyproc]	3 i. Emergency procedures (evacuation)	radio, Required  1 I have NOT received training 2 I have received training 3 I would like more training
[chs_sththowreportwpincid]	3 j. How to report a workplace incident	radio, Required  1 I have NOT received training 2 I have received training 3 I would like more training
[chs_sthttbworkplace]	3k. TB in the workplace	radio, Required  1 I have NOT received training 2 I have received training 3 I would like more training
[chs_sththivwporkplace]	3 l. HIV in the workplace	radio, Required  1 I have NOT received training 2 I have received training 3 I would like more training
[chs_sthcovidwporkplace]	3 m. COVID 19 training	radio, Required  1 I have NOT received training 2 I have received training 3 I would like more training
	[chs_sthtdoffingppe]  [chs_thtcovidpreventt]  [chs_sthtneedlestickinjprev]  [chs_sththivaidsprevention]  [chs_sthtriskwastemgt]  [chs_sthtchemicalhazards]  [chs_sthtchemicalhazards]  [chs_sthttemergencyproc]  [chs_sthtthowreportwpincid]  [chs_sthttbworkplace]	[chs_sthtdoffingppe] 3 c. Doffing (removing) of PPE  [chs_sthtcovidpreventt] 3 d. COVID-19 how to prevent transmission  [chs_sthtneedlestickinjprev

88	<pre>[chs_sfwphriskasmtconducted]</pre>	Section Header: SECTION 4: Workplace Hazards  4.1 Has a risk assessment been conducted in your facility?  Choose ONLY ONE	radio, Required  1 Yes 2 No 3 Not sure  Custom alignment: RH
89	[chs_sfwphriskinclcovid]	4.2 Did your recent risk assessment include COVID-19 Choose ONLY ONE	radio, Required  1 Yes 2 No 3 Not sure  Custom alignment: RH
90	[chs_sfwphoftenwpsidone]	4.3 How often are workplace safety inspections done Choose ONLY ONE	radio, Required  1 Monthly  2 Every 3 months  3 Annually  4 Other  5 Not sure  Custom alignment: LH
91	[chs_sfwphimplemented]	4.4 Are the control measures recommended by the risk assessment being implemented?  Choose ONLY ONE	radio, Required  1 Yes 2 No 3 Somewhat 4 Not Sure  Custom alignment: LH
92	[chs_sfwphhoweasygetinfo]	4.5 How easy do you think it is to get information you need about workplace hazards in your area?	radio, Required  1 Easy 2 Not Easy 3 Not Sure  Custom alignment: RH
93	[chs_sfwphreportedhseasyfui]	4.6 After a health & safety issue is reported, how easy is it to get follow-up information from management?	radio, Required  1 Easy 2 Not Easy 3 Not Sure  Custom alignment: RH
94	[chs_sfwphinfcontrimpr]	4.7 How much has your infection control behavior improved since COVID-19	radio, Required  1 A little 2 Reasonable 3 A lot  Custom alignment: RH
95	[chs_sfwphworkhomeatl5ldp]	4.8 Did you work from home during the two level 5 lock down periods?	yesno, Required  1 Yes 0 No  Custom alignment: RH
96	[chs_sfwphotherworkadapt]	4.9 If you were at work did you use other work adaptations	radio, Required  1 Yes 2 No 3 Flexi time (different hours at work) 4 Work rotation (different days at work) 5 Both 6 Other  Custom alignment: LH

07		4.10	undin Descriped
97	[chs_sfwphhazardouswrkarea]	4.10 How risky do you feel your work area was?	radio, Required  1 Risky
			2 Normal (expected risk)
			3 Low risk
			4 No Risk
			5 Not Sure
			Custom alignment: LH
98	[chs_sfwpheasytoreporthaz]	4.11 How easy is it to report a workplace hazard in your	radio, Required
		area?	1 Easy
			2 Not Easy
			3 Not Sure
			Custom alignment: LH
99	[chs_sfwphidentifywphaz]	4.12. When you identify what you think is a workplace	radio, Required
		hazard	1 I generally do not report it
			2 I generally report it but usually nobody comes to investigate
			3 I generally report it and it is usually promptly investigated, but then nothing is done to fix it
			4 I generally report it and it is usually promptly
			investigated and resolved
			5 N/A
100	[chs_sfioheyeprotection]	Section Header: SECTION 5: Occupational Health & Safety Procedures	radio, Required
100	[ens_stroneyeproceector]	and Barriers	1 Never
		5.1 I use eye protection (other than prescription glasses)	2 Less than half of the time
		during procedures that have a potential for splashes and aerosols	3 Half of the time
		Choose ONLY ONE	
			4 More than half of the time
			5 Always
101	[chs_sfiohrecapneedles]	5.2 I recap needles Choose ONLY ONE	radio, Required
		CHOOSE ONLY ONL	1 Never
			2 Less than half of the time
			3 Half of the time
			4 More than half of the time
			5 Always
102	[chs sfiohdispinscontainer]	5. 3 I dispose of sharps in a sharps container	radio, Required
	2.12.11.4	Choose ONLY ONE	1 Never
			2 Less than half of the time
			3 Half of the time
			4 More than half of the time
103	[chs_sfiohusefumehoods]	5.4 I use fume hoods/down drafts/ microbiological safety cabinet, when indicated	radio, Required
		Choose ONLY ONE	1 Never
			2 Less than half of the time
			3 Half of the time
			4 More than half of the time
			5 Always
104	[chs_sfiohwearn95indicated]	5.5. I wear an N95 respirator when indicated by a risk	radio, Required
		assessment	1 Never
		Choose ONLY ONE	2 Less than half of the time
			3 Half of the time
			4 More than half of the time
			5 Always
			J , aways

105   Chtsfahnakoszecote    S.5 I was a mask when I share a room with someone   200, Required   1 Never   2 Less than half of the time   3 Half of the time   5 Always   1 Never   2 Less than half of the time   5 Always   1 Never   2 Less than half of the time   5 Always   1 Never   2 Less than half of the time   1 Never   2 Less than half of the time   1 Never   2 Less than half of the time   1 Never   2 Less than half of the time   1 Never   2 Less than half of the time   2 New room of the time   2 New room of the time   3 Never				
100	105	[chs_sfiohmaskwsomeone]		
3   Half of the time   4   More than half of the time   5   Always			CHOOSE ONLY ONE	1 Never
4   Move than half of the time   5   Always				
105   Crbs_sflobsecialdistancing   S.7   Inbisery social distancing at work   Close ONLY ONE   1   Never   2   Less than half of the time   3   Half of the time   4   More than half of the time   4   More than half of the time   3   Half of the time   4   More than half of the time   5   Always   Close ONLY ONE   Close Only One				3 Half of the time
106   chs_stichnocistatistancing    S.71 tobories social distancing at work   1   Newer   2   Less than half of the time   3   Half of the time   3   Half of the time   4   More than half of the time   5   Always   1   Newer   2   Less than half of the time   4   More than half of the time   4   More than half of the time   5   Always   1   Newer   2   Less than half of the time   4   More than half of the time   4   More than half of the time   4   More than half of the time   5   Always   1   Newer   2   Less than half of the time   1   Newer   2   Less than half of the time   3   Half of the time   4   More than half of the time   5   Always   1   Newer   2   Less than half of the time   4   More than half of the time   4   More than half of the time   5   Always   1   Newer   2   Less than half of the time   4   More than half of the time   5   Always   1   Newer   2   Less than half of the time   6   More than half of the time   7   Newer   2   Less than half of the time   7   Newer   2   Less than half of the time   7   Newer   2   Less than half of the time   7   Newer   2   Less than half of the time   7   Newer   2   Less than half of the time   7   Newer   2   Less than half of the time   8   Newer   2   Less than half of the time   8   Newer   2   Less than half of the time   9   Newer   2   Less than half of the time   9   Newer   2   Less than half of the time   9   Newer   2   Less than half of the time   9   Newer   2   Less than half of the time   9   Newer   2   Less than half of the time   9   Newer   2   Less than half of the time   9   Newer   2   Less than half of the time   9   Newer   2   Less than half of the time   9   Newer   2   Less than half of the time   9   Newer   2   Newer   2   Newer				4 More than half of the time
Choose ONLY ONE   1   Never   2   Less than half of the time   4   More than half of the time   3   Half of the time   4   More than half of the time   5   Always   1   Never   2   Less than half of the time   4   More than half of the time   1   Never   2   Less than half of the time   3   Half of the time   4   More than half of the time   5   Always   Note of the time   6   Always   Note of the time   8   All of the time   8   Always   Note of the time				5 Always
Choose ONLY ONE   1   Never   2   Less than half of the time   4   More than half of the time   3   Half of the time   4   More than half of the time   5   Always   1   Never   2   Less than half of the time   4   More than half of the time   1   Never   2   Less than half of the time   3   Half of the time   4   More than half of the time   5   Always   Note of the time   6   Always   Note of the time   8   All of the time   8   Always   Note of the time	106	[chs sfiohsocialdistancing]	5.7 I observe social distancing at work	radio, Required
3   Half of the time   4   More than half of the time   5   Always				
A More than half of the time   S Aways				2 Less than half of the time
107				3 Half of the time
107				4 More than half of the time
107   Chs_sfiohtandsanitizers    S.8   Use hand sanitiser/ wash hands regularly   Order ONLY ONE   Chs_sfiohtandsanitizers    S.8   Use hand sanitiser/ wash hands regularly   Order ONLY ONE   Chs_sfiohtandsanitizers    S.8   Use hand sanitiser/ wash hands regularly   I Never   S.8   Uses than half of the time   A.8   More than				
1   Never   2   Less than half of the time   3   Half of the time   4   More than half of the time   5   Always	107	Fabruari and and a second a second and a second a second and a second	EQUIPE hand conitions/ week hands requirely	
2   Less than half of the time   3   Half of the time   4   More than half of the time   5   Always   5	107	[Cns_Stionnandsanitizerr]		
3   Half of the time				
108   Chs_sfiohreportspillsseen   5.7   report spills   see   Choose ONLY ONE   2   Less than half of the time   3   Half of the time   4   More than half of the time   5   Always   Choose ONLY ONE   2   Less than half of the time   4   More than half of the time   6   Always   Choose ONLY ONE   2   Less than half of the time   6   Always   Choose ONLY ONE   2   Less than half of the time   6   Always   Choose ONLY ONE   2   Less than half of the time   6   Always   Choose ONLY ONE   2   Less than half of the time   6   Always   Choose ONLY ONE   2   Less than half of the time   6   Always   Choose ONLY ONE   2   Less than half of the time   6   Always   Choose ONLY ONE   2   Less than half of the time   6   Always   Choose ONLY ONE   2   Less than half of the time   6   Always   Choose ONLY ONE   3   Half of the time   6   Always   Choose ONLY ONE   3   Half of the time   6   Always   Choose ONLY ONE   3   Half of the time   6   Always   Choose ONLY ONE   3   Half of the time   6   Always   Choose ONLY ONE   3   Half of the time   6   Always   Choose ONLY ONE   3   Half of the time   6   Always   Choose ONLY ONE   3   Half of the time   6   Always   Choose ONLY ONE   3   Half of the time   6   Always   Choose ONLY ONE   3   Half of the time   6   Always   Choose ONLY ONE   3   Half of the time   6   Always   Choose ONLY ONE   3   Half of the time   6   Always   Choose ONLY ONE   6   Choose ONLY ONE   6   Choose ONLY ONE   6   Choose ONLY ONE   Choose ONLY ONE   6   Choose ONLY ONLY ONLY ONLY ONLY ONLY ONLY ONLY				
108				
108   Chs_sfiohreportspillsseen   S.71 report spills   See   Choose ONLY ONE   Choose Only Only Only Only Only Only Only Only				
1   Never   2   Less than half of the time   3   Half of the time   4   More than half of the time   5   Always				5   Always
109	108	[chs_sfiohreportspillsseen]		
3   Half of the time   4   More than half of the time   5   Always			CHOOSE ONLY ONE	
109   [chs_sfiohreporttomyhrep]   5.81 feel comfortable reporting health and safety problems to my H5rep or manager   1 Never   2 Less than half of the time   3 Half of the time   4 More than half of the time   3 Half of the time   4 More than half of the time   3 Half of the time   4 More than half of the time   3 Half of the time   4 More than half of the time   5 Always   1 Never   2 Less than half of the time   3 Half of the time   3 Half of the time   3 Half of the time   4 More than half of the time   5 Always   1 Never   2 Less than half of the time   5 Always   1 Never   2 Less than half of the time   3 Half of the time   4 More than half of the time   5 Always   1 Never   2 Less than half of the time   5 Always   1 Never   2 Less than half of the time   3 Half of the time   4 More than half of the time   3 Half of the time   4 More than half of the time   5 Always   1 Never   2 Less than half of the time   5 Always   1 Never   2 Less than half of the time   3 Half of the time   4 More than half of the time   5 Always   1 Never   2 Less than half of the time   1 Never   2 Less than half of the time   3 Half of the time   4 More than half of the time   3 Hal				
109				3 Half of the time
109				4 More than half of the time
problems to my HSrep or manager    1   Never				5 Always
Choose ONLY ONE  Choose ONLY ONE  110 [chs_sfiohsuggestcorrhsp]  Line Choose ONLY ONE  111 [chs_sfiohsuggestcorrhsp]  Choose ONLY ONE  112 [chs_sfiohrepinjillnesswk]  Line Choose ONLY ONE  Tadio, Required  1 Never  2 Less than half of the time  3 Half of the time  4 More than half of the time  5 Always  Tadio, Required  1 Never  2 Less than half of the time  4 More than half of the time  1 Never  2 Less than half of the time  4 More than half of the time  1 Never  2 Less than half of the time  4 More than half of the time  1 Never  2 Less than half of the time  4 More than half of the time  1 Never  2 Less than half of the time  4 More than half of the time	109	[chs_sfiohreporttomyhrep]		radio, Required
2   Less than half of the time   3   Half of the time   4   More than half of the time   5   Always				1 Never
110    [chs_sfiohsuggestcorrhsp]   5.9   make suggestions for correcting health and safety problems   Choose ONLY ONE     1   Never     2   Less than half of the time   3   Half of the time   4   More than half of the time   5   Always     111    [chs_sfiohclearsupswpract]   Choose ONLY ONE     112   [chs_sfiohrepinjillnesswk]   5.11   am encouraged to report injuries and illness at work   12   Less than half of the time   1   Never   2   Less than half of the time   1   Never   2   Less than half of the time   1   Never   2   Less than half of the time   1   Never   2   Less than half of the time   1   Never   2   Less than half of the time   1   Never   2   Less than half of the time   1   Never   2   Less than half of the time   1   Never   2   Less than half of the time   3   Half of the time   3   Half of the time   4   More than half of t				2 Less than half of the time
110   [chs_sfiohsuggestcorrhsp]   5.9   make suggestions for correcting health and safety problems   1   Never   2   Less than half of the time   3   Half of the time   4   More than half of the time   5   Always				3 Half of the time
110   [chs_sfiohsuggestcorrhsp]   5.9   make suggestions for correcting health and safety problems   1   Never   2   Less than half of the time   3   Half of the time   4   More than half of the time   5   Always				4 More than half of the time
problems Choose ONLY ONE    1   Never				5 Always
problems Choose ONLY ONE    1   Never	110	[chs sfiohsuggestcorrhsp]	5.9 I make suggestions for correcting health and safety	radio, Required
2 Less than half of the time 3 Half of the time 4 More than half of the time 5 Always  111 [chs_sfiohclearsupswpract]			problems	
111   [chs_sfiohclearsupswpract]   5.10   get clear supervision regarding safe work practices   radio, Required   1   Never   2   Less than half of the time   3   Half of the time   4   More than half of the time   5   Always     112   [chs_sfiohrepinjillnesswk]   5.11   am encouraged to report injuries and illness at work   Choose ONLY ONE   Tadio, Required   1   Never   2   Less than half of the time   3   Half of the time   3   Half of the time   3   Half of the time   4   More than half of the time   5   More than ha			Choose UNLY UNE	2 Less than half of the time
111				3 Half of the time
111				4 More than half of the time
111   [chs_sfiohclearsupswpract]   5.10   get clear supervision regarding safe work practices   radio, Required   1   Never   2   Less than half of the time   3   Half of the time   4   More than half of the time   5   Always     112   [chs_sfiohrepinjillnesswk]   5.11   am encouraged to report injuries and illness at work   Choose ONLY ONE   1   Never   2   Less than half of the time   3   Half of the time   4   More than half of the time   4   More than half of the time   4   More than half of the time   5   Half of th				
Choose ONLY ONE  1 Never 2 Less than half of the time 3 Half of the time 4 More than half of the time 5 Always  112 [chs_sfiohrepinjillnesswk]  Choose ONLY ONE  5.11 am encouraged to report injuries and illness at work Choose ONLY ONE  7 radio, Required 1 Never 2 Less than half of the time 3 Half of the time 4 More than half of the time 4 More than half of the time	111	[chs_sfichs]oansunsunnast]	5 10 Last clear supervision regarding safe work practices	
2 Less than half of the time 3 Half of the time 4 More than half of the time 5 Always  112 [chs_sfiohrepinjillnesswk] 5.11 I am encouraged to report injuries and illness at work Choose ONLY ONE  1 Never 2 Less than half of the time 3 Half of the time 4 More than half of the time 4 More than half of the time	111	[cns_sitoncrearsupswpract]		
112   [chs_sfiohrepinjillnesswk]   5.11   am encouraged to report injuries and illness at work   Choose ONLY ONE   1   Never   2   Less than half of the time   3   Half of the time   4   More than half of the time   5   Always   1   Never   2   Less than half of the time   5   Never   2   Less than half of the time   6   Never   7   Never				
112 [chs_sfiohrepinjillnesswk]   5.11   am encouraged to report injuries and illness at work   radio, Required   1   Never   2   Less than half of the time   3   Half of the time   4   More than half of the time   4   More than half of the time   4   More than half of the time   5   Always				
112 [chs_sfiohrepinjillnesswk]  5 Always  5 Always  5 Always  7 Tradio, Required  1 Never  2 Less than half of the time  3 Half of the time  4 More than half of the time				
112 [chs_sfiohrepinjillnesswk] 5.11 I am encouraged to report injuries and illness at work Choose ONLY ONE  1 Never 2 Less than half of the time 3 Half of the time 4 More than half of the time				
Choose ONLY ONE  1 Never 2 Less than half of the time 3 Half of the time 4 More than half of the time				
2 Less than half of the time 3 Half of the time 4 More than half of the time	112	[chs_sfiohrepinjillnesswk]		
3 Half of the time 4 More than half of the time			SHOOL SHEET STIFE	
4 More than half of the time				
5 Always				
				5 Always

_				
	113	[chs_sfiohtrustmanager]	5.12 I trust my manager to make my workplace safe	radio, Required
			Choose ONLY ONE	1 Never
				2 Less than half of the time
				3 Half of the time
				4 More than half of the time
				5 Always
	114	[chs_sfiohtrusthscomm]	5.13 I trust my health and safety committee to make my	radio, Required
			workplace safe Choose ONLY ONE	1 Never
			CHOOSE ONLY ONE	2 Less than half of the time
				3 Half of the time
				4 More than half of the time
				5 Always
	115	[chs_sfiohrecnf]	When recommended health and safety including COVID-19	descriptive
		[e.i.s_5/120iii ee.ii. ]	prevention procedures are NOT followed, please rate how	- dess.,p.,, e
			often you think each of the following reasons play a role	
	116	[chs_sfiohrecnfnotentime]	5.14 Not enough time/too much work  Choose ONLY ONE	radio, Required
				1 Never
				2 Less than half of the time
				3 Half of the time
				4 More than half of the time
				5 Always
				6 N/A
	117	[chs_sfiohrecnfpooravequip]	5.15 Poor availability of proper equipment	radio, Required
			Choose ONLY ONE	1 Never
				2 Less than half of the time
				3 Half of the time
				4 More than half of the time
				5 Always
				6 N/A
	118	[chs_sfiohrecnflackspace]	5.16 Lack of proper space	radio, Required
			Choose ONLY ONE	1 Never
				2 Less than half of the time
				3 Half of the time
				4 More than half of the time
				5 Always
				6 N/A
	119	[chs sfiohrecnfnotfeelrisk]	5.17 Do not feel the risk requires it	radio, Required
			Choose ONLY ONE	1 Never
				2 Less than half of the time
				3 Half of the time
				4 More than half of the time
				5 Always
				6 N/A
	120	[chs_sfiohrecnfpeerpress]	5.18 Peer pressure	radio, Required
	120	[ cua_artom ecurbeer.bi.ess ]	Choose ONLY ONE	1 Never
				2 Less than half of the time
				3 Half of the time
				4 More than half of the time
				5 Always
				6 N/A
				U IV/A

			T	
	121	[chs_sfiohrecnfnottrained]	5.19 Not trained well enough Choose ONLY ONE	radio, Required  1 Never
				2 Less than half of the time
				3 Half of the time
				4 More than half of the time
				5 Always
				6 N/A
	122	[chs_sfiohrecnfsupervnot]	5.20 Proper supervision not provided	radio, Required
	122	[ clis_srionrechrsupervnoc]	Choose ONLY ONE	1 Never
				2 Less than half of the time
				3 Half of the time
				4 More than half of the time
				5 Always
				6 N/A
	123	[chs_sfiohrecnfnosupportm]	5.21 Not supported by my manager	radio, Required
		22	Choose ONLY ONE	1 Never
				2 Less than half of the time
				3 Half of the time
				4 More than half of the time
				5 Always
				6 N/A
	124	[chs_sfiohrecnfotherspecify	5.22 Other (please specify)	radio, Required
		]	Choose ONLY ONE	1 Never
				2 Less than half of the time
				3 Half of the time
				4 More than half of the time
				5 Always
				6 N/A
	125	[chs_sfirecntotherspecify]	Specify other in 5.22 above	text
		Show the field ONLY if:		
		[chs_sfiohrecnfotherspecify] = '1' or [chs_sfiohrecnfothers		
		pecify] = '2' or [chs_sfiohrecnf		
		otherspecify] = '3' or [chs_sfio		
		hrecnfotherspecify] = '4' or [c hs_sfiohrecnfotherspecify] =		
		'5' or [chs_sfiohrecnfotherspe		
		cify] = '6'		
	126	[timestested]	Section Header: SECTION 6: COVID-19	text (number, Min: 0, Max: 100)
			How many times have you had a PCR test for COVID-19	
	127	[testplace]	Where did you test? NHLS or Private Labs or Both	radio
				1 NHLS
				2 Private Labs
				3 Both
-	120	Take colveniantharithing	6.1 Have you over tested positive for COVID 10.3	
	128	[chs_ssixceverttpositive]	6.1 Have you ever tested positive for COVID-19?  Choose ONLY ONE	radio, Required 1 Yes
				2 No
				3 Not sure
				Custom alignment: RH
-	129	Toho coivehanneti1	6.2 How many congrate times have you had COVID 10	
	129	[chs_ssixchmanytimes]	6.2 How many separate times have you had COVID-19 Disease?	radio, Required  1 Once
		Show the field ONLY if: [chs_ssixceverttpositive]= '1'	Choose ONLY ONE	
		[c5_55/Accade (rhos)(inela)		2 Twice
				3 Three or more
				Custom alignment: RH
				custom angliment. Kit

	130	[chs_ssixcwhentpositive]	6.3a When did you test positive? Tick all that apply if you	che	ckbox, Required	
		Show the field ONLY if: [chs_ssixceverttpositive] = '1'	suffered COVID-19 more than once. Check all boxes that apply	1	chs_ssixcwhentpositive1	Before the first wave (up to 7 June 2020)
				2	chs_ssixcwhentpositive2	First wave (7 June - 22 August 2020)
				3	chs_ssixcwhentpositive3	Between 1st and 2nd wave (23 Aug - 15 Nov 2020)
				4	chs_ssixcwhentpositive4	Second wave (15 Nov - 6 Feb 2021)
				5	chs_ssixcwhentpositive5	Between 2nd and 3rd wave (6 Feb - 10 June 2021)
				6	chs_ssixcwhentpositive6	Third wave (19 May - 26 September 2021)
				7	chs_ssixcwhentpositive7	After 3rd wave ( 26 September 2021 - )
				8	chs_ssixcwhentpositive8	Fourth wave (4th December 2021)
	131	[chs_ssixcyesctowhomrep]	6.4 If Yes to COVID, to whom did you report this?	che	ckbox, Required	
		Show the field ONLY if: [chs_ssixceverttpositive] = '1'	Check all boxes that apply		chs_ssixcyesctowhomrep′	NHLS Occupational Health Nurse
				2	chs_ssixcyesctowhomrep2	2 First Aid Service
				3	chs_ssixcyesctowhomrep3	Health & Safety Representative
				4	chs_ssixcyesctowhomrep4	1 Colleague
				5	chs_ssixcyesctowhomrep	Supervisor/ Manager
				6	chs_ssixcyesctowhomrep6	Other
				7	chs_ssixcyesctowhomrep7	7 Did Not Report this
	132	[chs_ssixcnotreportedwhy] Show the field ONLY if: [chs_ssixcyesctowhomrep(7)] = '1'	If you have NOT reported please describe the reasons:	text		
	133	[chs_ssixcsyptomscexp]	6.5.a If you had COVID-19, what COVID-19 symptoms did	che	ckbox, Required	
		Show the field ONLY if:	you experience: Check all boxes that apply	1	chs_ssixcsyptomscexp1	none
		[chs_ssixceverttpositive]='1'		2	chs_ssixcsyptomscexp2	sore throat
				3	chs_ssixcsyptomscexp3	runny nose
				4	chs_ssixcsyptomscexp4	headache
				5	chs_ssixcsyptomscexp5	fever
				6	chs_ssixcsyptomscexp6	loss of smell
				7	chs_ssixcsyptomscexp7	body aches
				8	chs_ssixcsyptomscexp8	chills
				9	chs_ssixcsyptomscexp9	short of breath
				10	chs_ssixcsyptomscexp10	difficulty concentrating
				11	chs_ssixcsyptomscexp11	fatigue
				12	chs_ssixcsyptomscexp12	gastrointestinal (stomach) symptoms
				13	chs_ssixcsyptomscexp13	sleep disorder
				14	chs_ssixcsyptomscexp14	anxiety
				15	chs_ssixcsyptomscexp15	depression
				16	chs_ssixcsyptomscexp16	other
Ш			<u> </u>	—ــا	•	1

134	[chs_ssixcothersymptom] Show the field ONLY if: [chs_ssixcsyptomscexp(16)] = '1'	Other (specify other symptom)	text
135	[chs_ssixclengthsymptoms]  Show the field ONLY if: [chs_ssixcsyptomscexp(1)] = '1' or [chs_ssixcsyptomscexp (2)] = '1' or [chs_ssixcsyptomscexp(3)] = '1' or [chs_ssixcsyptomscexp(4)] = '1' or [chs_ssixcsyptomscexp(5)] = '1' or [chs_ssixcsyptomscexp(6)] = '1' or [chs_ssixcsyptomscexp(6)] = '1' or [chs_ssixcsyptomscexp(7)] = '1' or [chs_ssixcsyptomscexp(8)] = '1' or [chs_ssixcsyptomscexp(9)] = '1' or [chs_ssixcsyptomscexp(10)] = '1' or [chs_ssixcsyptomscexp(11)] = '1' or [chs_ssixcsyptomscexp(12)] = '1' or [chs_ssixcsyptomscexp(14)] = '1' or [chs_ssixcsyptomscexp(15)] = '1' or [chs_ssixcsyptomscexp(14)] = '1' or [chs_ssixcsyptomscexp(15)] = '1' or [chs_ssixcsyptomscexp(15)] = '1' or [chs_ssixcsyptomscexp(15)] = '1' or [chs_ssixcsyptomscexp(16)] = '1'	6.5.b Length (in days/weeks/months) that you experienced symptoms Choose ONLY ONE	radio, Required  1 0-3 days 2 3-7 days 3 7-14 days 4 14-30 days 5 30 days to 2 months 6 2-3 months 7 more than 3 months
136	[chs_ssixcseveritysmptoms] Show the field ONLY if: [chs_ssixcsyptomscexp(1)] = '1' or [chs_ssixcsyptomscexp (2)] = '1' or [chs_ssixcsyptoms cexp(3)] = '1' or [chs_ssixcsypt omscexp(4)] = '1' or [chs_ssixc syptomscexp(5)] = '1' or [chs_ssixc syptomscexp(6)] = '1' or [chs_ssixcsyptomscexp(7)] = '1' or [chs_ssixcsyptoms cexp(9)] = '1' or [chs_ssixcsypt omscexp(10)] = '1' or [chs_ssix csyptomscexp(11)] = '1' or [chs_ssixcsypt omscexp(10)] = '1' or [chs_ssixcsypt omscexp(11)] = '1' or [chs_ssixcsypt omscexp(11)] = '1' or [chs_ssixcsypt omscexp(11)] = '1' or [chs_ssixcsypt omscexp(15)] = '1' or [chs_ssixcsypt omscexp(15)] = '1' or [chs_ssixcsypt omscexp(15)] = '1' or [chs_ssixcsypt omscexp(16)] = '1'	6.5.c How severe were your symptoms or infection?  Choose ONLY ONE	radio, Required    Mild
137	[chs_ssixcwhilecovidu] Show the field ONLY if: [chs_ssixceverttpositive]='1'	6.6.a While ill with COVID-19 were you  Choose ONLY ONE	radio, Required  a Fine / No symptoms  b Self-medicating  c Prescribed home oxygen  d Hospitalised
138	[chs_ssixcdayshospitalised] Show the field ONLY if: [chs_ssixcwhilecovidu] = 'd'	6.6.b If hospitalised how long in days	text (number)
139	[chs_ssixcmonthyr] Show the field ONLY if: [chs_ssixcwhilecovidu] = 'd'	6.6.c What month and year were you hospitalized  Month & Year	text (date_dmy), Required

140	[chs_ssixccovidinfectionfr]	6.7 Did you get your COVID-19 infection from:	checkbox, Required			
"	Show the field ONLY if: [chs_ssixceverttpositive]='1'	Check all boxes that apply	1 chs_ssixccovidinfectionfr1 Someone at			
			home			
			2 chs_ssixccovidinfectionfr2 A colleague at work			
			3 chs_ssixccovidinfectionfr3 Work activity			
			4 chs_ssixccovidinfectionfr4 Travelling to work			
			5 chs_ssixccovidinfectionfr5 From the community (e.g. a funeral or wedding or visiting friends and family)			
			6 chs_ssixccovidinfectionfr6 Unknown			
141	[chs_ssixchadcaftervacc] Show the field ONLY if: [chs_ssixceverttpositive]='1'	6.8 Were you diagnosed with COVID-19 after receiving all your COVID-19 vaccination doses?  Choose ONLY ONE	radio, Required  1 Yes 2 No 3 Don't Know (DK)			
			Custom alignment: RH			
142	[chs_ssixcafterlastcvacch1] Show the field ONLY if: [chs_ssixchadcaftervacc] = '1'	6.9 How long after your last COVID-19 vaccination were you diagnosed with COVID-19 Choose ONLY ONE	radio, Required  1 < 2 weeks 2 2-4 weeks 3 2-3 months 4 3-5 months 5 6+ months			
143	[chs_ssixcdrtoldulongc]	6.10 Has your doctor told you, you are suffering from long	radio, Required			
	Show the field ONLY if: [chs_ssixceverttpositive]='1'	COVID Choose ONLY ONE	1 Yes 2 No 3 Don't Know (DK)  Custom alignment: RH			
144	[chs_ssixcrnsymptoms]	6.11 Have you had any return of symptoms or new	radio, Required			
	Show the field ONLY if:	symptoms after you recovered from COVID-19?	1 Yes			
	[chs_ssixceverttpositive]='1'	Choose ONLY ONE	2 No			
			3 Don't Know (DK)			
			Custom alignment: RH			
145	[chs_ssixcwhichsymptomsr]	6.12 If Yes, Which symptoms, select all that apply Choose ONLY ONE	radio, Required			
	Show the field ONLY if: [chs_ssixcrnsymptoms]='1'		1 none			
	[cris_ssixcriisymptoms]= 1		2 sore throat			
			3 runny nose			
			4 headache			
			5 fever			
			6 loss of smell			
			7 body aches			
			8 chills			
			9 short of breath			
			10 difficulty concentrating			
			11 fatigue			
			12 gastrointestinal (stomach) symptoms			
			13 sleep disorders			
			14 anxiety			
			15 depression			
			16 other			

146	[chs_ssixcothersymptomsr] Show the field ONLY if: [chs_ssixcwhichsymptomsr] =	If other symptoms, specify Specify if other	text
147	'16'  [chs_ssixcsymptsimpactedw]  Show the field ONLY if: [chs_ssixcrnsymptoms]='1'	6.13 Did these symptoms impact on your work?  Choose ONLY ONE	radio, Required  1 Yes 2 No 3 Don't Know (DK)  Custom alignment: RH
148	[chs_ssixchowaffectedwork] Show the field ONLY if: [chs_ssixcsymptsimpactedw] = '1'	6.14 How have they affected your work?  Choose ONLY ONE	radio, Required  1 More tired  2 Need to concentrate harder  3 More stress at work  4 Needed days off  5 Can't cope physically  6 Other problem
149	[chs_ssixcotherimpactedws]  Show the field ONLY if: [chs_ssixchowaffectedwork] = '6'	Specify other problem	text
150	[chs_ssevpreexistinghc]	7.1 Do you have any pre-existing health conditions?  Choose ONLY ONE	radio, Required  1 Yes 2 No 3 Don't Know (DK)  Custom alignment: RH
151	[chs_ssevpreexistingc] Show the field ONLY if: [chs_ssevpreexistinghc] = '1'	7.2 Which do you have? select all that apply Check all boxes that apply	checkbox, Required  1
152	[chs_ssevotherpreexistingc] Show the field ONLY if: [chs_ssevpreexistingc(15)] = '1'	If Other pre-existing condition, specify Specify if other	text
153	[chs_ssevconditcontrolled] Show the field ONLY if: [chs_ssevpreexistinghc] = '1'	7.3 Is your condition under control (you take medication regularly, no flare-ups, medical tests good)  Choose ONLY ONE	radio, Required  1 Yes 2 No 3 Don't Know (DK)  Custom alignment: RH
154	[chs_ssevnotespreexistingc]	Notes for pre-existing condition	notes Custom alignment: RH

		<u></u>			
15	[vaccc19]	Section Header: Section 8: COVID-19 Vaccinations  8.1 Have you been vaccinated for COVID-19?  Choose ONLY ONE	radio, Required  1 Yes 2 No  Custom alignment: RH		
156	[ chs_seigvaccinereceived]  Show the field ONLY if: [vaccc19] = '1'	8.2a Which vaccine did you receive?  Choose ONLY ONE	radio, Required  1 J & J (Jansen)  2 Pfizer  3 Other  Custom alignment: RH		
157	7 [chs_seigpfizerall] Show the field ONLY if: [vaccc19] = '1'	8.2b Did you have all the doses?	yesno, Required  1 Yes 0 No  Custom alignment: RH		
158	3 [chs_seigothervaccinerec] Show the field ONLY if: [vaccc19] = '1'	8.2c If vaccine received is other, specify Specify if other	text Custom alignment: RH		
159	P [chs_seigreasontovaccinate] Show the field ONLY if: [vaccc19] = '1'	8.3a If Yes tick all the reasons for your decision Check all boxes that apply	checkbox, Required a chs_seigreasontovaccinatea I did not want to get COVID19		
			b chs_seigreasontovaccinateb   I did not want to get COVID-19 side effects		
			c chs_seigreasontovaccinatec I trusted the research in developing the vaccine		
			d chs_seigreasontovaccinated To protect my family from COVID		
			e chs_seigreasontovaccinatee I want to be able to see friends and family		
			f chs_seigreasontovaccinatef I did not want to get long COVID		
			g chs_seigreasontovaccinateg It was organised for me		
			h chs_seigreasontovaccinateh My doctor/family said I should get the vaccine		
			I chs_seigreasontovaccinatei The vaccine is safe and effective		
			j chs_seigreasontovaccinatej To protect my pregnancy k chs_seigreasontovaccinatek Other		
			K Chis_seignedsonitovaccinatek Other		

160 [negresons] 8.3b If no please in	ndicate all your reasons che	checkbox	
Show the field ONLY if: [vaccc19] = '2'	1	negresons1	I am worried about the vaccine side effects
	2	negresons2	I am scared of needles
	3	negresons3	My religion prevents me from having vaccines
	4	negresons4	I do not feel there has been enough research on the vaccine
	5	negresons5	I do not know what the long term effects of the vaccine will be?
	6	negresons6	It was difficult to get to a place to get the vaccine
	7	negresons7	l did not have the funds for transport to a vaccine site
	8	negresons8	The queues were too long
	9	negresons9	My health condition does not allow it
	10	negresons10	I am healthy I don't need it
	11	negresons11	It is being forced on me
	12	negresons12	Vaccinated people still get COVID-19
	13	negresons13	l have natural immunity from a previous COVID-19 infection
	14	negresons14	l am not sure how it will affect my fertility
	15	negresons15	It is a plan from big pharmaceutical companies to make money
	16	negresons16	l worry it will affect my pregnancy
	17	negresons17	I feel I may get COVID-19 in the queue
	18	negresons18	l am not sure if the vaccine is safe
	19	negresons19	l do not trust how the vaccines are made
	20	negresons20	COVID is a conspiracy
	Cus	tom alignment: RH	1
161 [chs_seigotherreasonvacc] If other reasons to	vaccinate, specify text		
Show the field ONLY if:  [chs_seigreasontovaccinate (k)] = '1'			
		io, Required	
Show the field ONLY if: OHASIS self-report	.?	Yes	
[vaccc19] = '1'	2	No	
	3	Don't Know (DK)	
	Cus	tom alignment: RH	1
163 [covid19_surveillance_healt Section Header: Form		pdown	
h_care_worker_study_complet Complete?		Incomplete	
		Unverified	
	[2]	Complete	



#### QUESTIONNAIRE (will be in an electronic format)

You have been invited to participate in a research study. This survey should take no more than 15 minutes to complete. Please note that by completing this questionnaire, you voluntarily agree to participate in this study.

This form is divided into six sections:

- 1. Information about you;
- 2. Your training;
- 3. Work related stress;
- 4. Your psychological wellbeing;
- 5. Your behaviour and practices.

#### SECTION 1. INFORMATION ABOUT YOU

- 1.1 Please indicate the perspective from which you are responding to the questions in this survey. Please select one response:
- Head of Unit
- Intern
- Community service MO
- Medical Officer
- Registrar
- Senior medical officer
- Consultant/Specialist
- Matron
- Professional Nurse
- Enrolled Assistant Nurse
- Enrolled / staff nurse
- Radiologist
- Physiotherapist
- Pharmacist
- Janitor
- Clerk
- Delivery
- Phlebotomist
- Other, please specify\_\_\_\_\_\_

1.2 What is the name of the facility where you are working?	
1.3 Do you work in:	
- inpatient	
-outpatient	
- both	
1.4 Where does the bulk of your patient contact take place i.e. m	ore than 3 days a week?
-Theater/procedures	
-Radiology	
-General medical ward	
- Surgical ward	
- Emergency unit	
- ICU/high care	
- COVID-19 isolation ward	
- Other, please specify	
1.5 How long have you worked as a healthcare worker?	months oryears
1.6 What is your age?	
1.7 Sex	
-Male	
-Female	
1.8 Home Language spoken:	
-English	
-Afrikaans	
-IsiZulu	
-IsiXhosa	
-Ndabele	
-Sepedi	
-Sesoto	
-Setswana	
-Tsonga	
-Swati	
-Venda	
-Other, please specify	
1.9 Country of birth:	
If not South African, how long have you been living in SA?	years
1.10 Have you had a work related illness or injury in the last 12	2 months? Y/N
If yes, please specify the nature of illness or injury.	
1.11 Have you been vaccinated for influenza this season? Y/N $$	
If not, please specify reasons why.	
-Did not have time to go.	
-No stock available.	
-Other, please specify	

- 1.12 Prior to the COVID-19 pandemic were any mental health/ managing stress workshops/ interventions available to you
- 1.13 Did you attend any? Yes / No
- 1.14 What is your biggest concern around the COVID-19 pandemic

### 1.15 Physical symptoms (PHQ-15) in the past 2 months

During the past 7 days, how much have you been bothered by any of the following problems?

Item Score - Not affected at all (0) affected a little (1) affected a lot (2)

- 1. Stomach pain
- 2. Back pain
- 3. Pain in your arms, legs, or joints (knees, hips, etc.)
- 4. Menstrual cramps or other problems with your periods WOMEN ONLY
- 5. Headaches
- 6. Chest pain
- 7. Dizziness
- 8. Fainting spells
- 9. Feeling your heart pound or race
- 10. Shortness of breath
- 11. Pain or problems during sexual intercourse
- 12. Constipation, loose bowels, or diarrhoea
- 13. Nausea, gas, or indigestion
- 14. Feeling tired or having low energy
- 15. Trouble sleeping

#### **SECTION 2 TRAINING**

Please	2.1 Please indicate all the	I have NOT	I have	I would like more
circle all	training you have received	received	received	training
that	at work (e.g. talks,	training	training	
apply	demonstrations, courses)			
	(CHOOSE ALL THAT APPLY)			
	a. Hand hygiene	1	2	3
	b Donning of personal	1	2	3
	protective equipment			
	c. Doffing of personal	1	2	3
	protective equipment			
	d. General Infection Control	1	2	3

e. COVID-19 infection of	control 1	2	3
f. Ventilation requirem	ents 1	2	3
g. Emergency procedur	res 1	2	3
(evacuation)			

# SECTION 3 Work Stress (ISMA)

The following questions assess your experience of stressful work situations. Since the beginning of the COVID-19 pandemic. For each question please tick how often you are affected by each situation. If you are never affected by the situation tick 1; if you are rarely affected by the situation tick 2; if you are sometimes affected by the situation tick 3; if you are often affected by the situation tick 4 and if you are affected by the situation nearly all of the time tick 5.

Never = 1 Rarely = 2 Sometimes = 3 Often = 4

Nearly all of the time = 5

PLEASE MAKE SURE THAT YOU ANSWER ALL FIFTEEN QUESTIONS BELOW.

3.	How often do you feel that:	1	2	3	4	5
1	You have too little authority to carry out the responsibilities assigned to you					
2	Being unclear on just what the scope and responsibilities of your job are doing					
3	Not knowing what opportunities for advancement or promotion exist for you					
4	Feeling that you have too heavy a workload, one that you cannot possibly finish during an ordinary working day					
5	Thinking that you will not be able to satisfy the conflicting demands of the various people over you					
6	Feeling that you are not fully qualified to handle your job					
7	Not knowing what your immediate supervisor thinks of you and how he or she evaluates your performance					
8	Not being able to get the necessary information to carry out your job					
9	Having to decide things that affect the lives of individuals, people that you know					
10	Feeling that you may not be liked or accepted by the people that you work with					
11	Feeling unable to influence your immediate supervisor's decisions that affect you					
12	Not knowing what the people that you work with expect of you					
13	Thinking that amount of work that you have to do may interfere with how well it gets done					

14	Feeling that you have to do things on the job that go against			
	your better judgement			
15	Feeling that your job tends to interfere with your family life			

# Perceptions

3.2	Perceptions	Strongly disagree	disagree	slightly disagree	slightly agree	agree	strongly agree
1.	I believe that my job is putting me at great risk	1	2	3	4	5	6
2.	I feel extra stress at work	1	2	3	4	5	6
3.	I am afraid of falling ill with COVID-19	1	2	3	4	5	6
4.	I feel I have little control over whether I get infected or not	1	2	3	4	5	6
5.	I feel I may be unlikely to survive if I get COVID-19	1	2	3	4	5	6
6.	I have thought about resigning because of COVID-19	1	2	3	4	5	6
7.	I am afraid I will pass COVID-19 on to others	1	2	3	4	5	6
8.	My family is worried they might get COVID-19 through me	1	2	3	4	5	6
9.	I feel altruistic working with COVID-19	1	2	3	4	5	6

# SECTION 4 Your psychological wellbeing and support structures

The following 12 questions relate to your psychological wellbeing (GHQ-12).

Please mark with a tick the response that you feel best suits the way that you have felt, though or behaved in the past few weeks. PLEASE MAKE SURE THAT YOU ANSWER ALL TWELVE QUESTIONS BELOW.

#### 4. 1 Have you recently.....

		1	1	1	7
		Better than	Same as	Worse than	Much worse than
		usual (1)	usual (2)	usual (3)	usual (4)
<u> </u>	December 1	usuui (±)	asaar (2)	usuui (s)	usuui (+)
i.	Been able to concentrate				
	on what you are doing?				
		Not at all (1)	No more	Rather	Much worse than
		Not at an (1)			
			than usual	more than	usual (4)
			(2)	usual (3)	
ii.	Lost much sleep over				
	worry?				
		T	T -	1	
		More so	Same as	Less useful	Much less useful
		than usual	usual (2)	than usual	(4)
		(1)		(3)	
iii.	Felt that you are playing			χ- /	
1111.					
	a useful part in things?				
		More so	Same as	Less so than	Much less
		than usual	usual (2)	usual (3)	capable (4)
			usuai (2)	dada (5)	capable (+)
<u> </u>		(1)			
iv.	Felt capable of making				
	decisions about things?				
		•	•	•	
		Not at all (1)	No more	Rather	Much worse than
		INOL at all (1)			
			than usual	more than	usual (4)
			(2)	usual (3)	
٧.	Felt constantly under				
1	strain?				
	Scium;	1	1	1	
		T .	T	T -	T .
1		Not at all (1)	No more	Rather	Much worse than
			than usual	more than	usual (4)
			(2)	usual (3)	
vi.	Folt that you sould not		(~)	43441 (3)	
VI.	Felt that you could not				
	overcome your				
L	difficulties?				
		Moraca	Campas	Locc so their	Much loss than
1		More so	Same as	Less so than	Much less than
1		than usual	usual (2)	usual (3)	usual (4)
		(1)			
vii.	Been able to enjoy your	,			
Ţ'''					
	normal day-to-day				
	activities?				
		More so	Same as	Less able	Much less able
1		than usual	usual (2)	than usual	than usual (4)
			usuai (∠)		alali usual (4)
		(1)		(3)	

iii.	Been able to face up to your problems?				
		Not at all (1)	No more than usual (2)	Rather more than usual (3)	Much worse than usual (4)
ix.	Been feeling unhappy and depressed?				
		Not at all (1)	No more than usual (2)	Rather more than usual (3)	Much worse than usual (4)
х.	Been losing confidence in yourself?				
		Not at all (1)	No more than usual (2)	Rather more than usual (3)	Much worse than usual (4)
xi.	Been thinking of yourself as a worthless person?				
		More so than usual (1)	About the same as usual (2)	Less so than usual (3)	Much less than usual (4)
ĸii.	Been feeling reasonably happy all things considered?	,			

#### 4.2 Social Support

The following questions measure the extent to which you can rely on various people in your life to give you support in different situations. Please tick for each of these people, that is, your supervisor/boss; your colleagues; your family, your friends and your husband/partner.

PLEASE MAKE SURE THAT YOU ANSWER ALL FIVE QUESTIONS BELOW. AND THAT YOU TICK FOR EACH OF THE PEOPLE IN EACH QUESTION.

Not at all = 1; A little = 2; Fairly often = 3; Extremely Often = 4

1. How much can each of these people be relied upon to help and support you or when things get tough at work							
	Not at all - 1	A little - 2	Fairly Often -	Extremely			
			3	often -4			
Your immediate							
supervisor/boss							
Your colleague/s							
Your family							

Your friend/s		
Your husband/partner		

2. How often do each o you are doing	f these people lo	et you know th	at they appreciat	e the job that
Your immediate	Not at all - 1	A little - 2	Fairly Often	Extremely
supervisor/boss			-3	often -4
Your colleague/s				
Your family				
Your friend/s				
Your husband/partner				
Your immediate supervisor/boss				

3. Do you access your employee wellness program for stress-related issues? Y/N

# SECTION 5 KAP Behaviour and practices

Please circle	5.1 How hazardous do you feel your	Risky	1
one	workplace is in general?	Normal	2
		Low risk	3
		No risk	4
	5.2 How hazardous do you feel your	Risky	1
	workplace since the COVID-19 pandemic	Normal	2
	began?	Low risk	3
		No risk	4
	5.3 Has your behaviour related to		
	infection control changed since the		
	COVID-19 pandemic?		
	5.4 From your perspective, is the supply of	sufficient	
	PPE available to you?	adequate	
		insufficient	
	5.5 Do you have access to reusable or	y/n	
	disposable ppe?		

5.6.Plea se circle one answer	When in contact with a COVID-19 confirmed or suspected patient.	Never	Less than half of the time	Half of the time	More than half of the time	Always
for each item	5.6.1 I use eye and face protection (other than prescription glasses)	1	2	3	4	5
	5.6.2 I use a surgical mask when dealing with patients when an N95 is not available	1	2	3	4	5
	5.6.3 I wear an N95	1	2	3	4	5
	5.6.4 I reuse my disposable masks	1	2	3	4	5
	5.6.5 I wear an gown or apron	1	2	3	4	5
	5.6.6 I wear gloves	1	2	3	4	5
	5.6.7 Cleaning supplies are available	1	2	3	4	5
	5.6.8 I make suggestions for correcting health and safety problems	1	2	3	4	5
	5.6.9 I get clear supervision regarding safe work practices	1	2	3	4	5
	5.6.10 I am encouraged to report injuries and illness at work	1	2	3	4	5
	5.6.11 I trust my manager to make my workplace safe	1	2	3	4	5
	5.6.12 I trust my health and safety committee to make my workplace safe	1	2	3	4	5

5.7 Please circle one	When in contact with a non-covid patient.	Never	Less than half of the time	Half of the time	More than half of the time	Always
answer for each	I use a surgical mask	1	2	3	4	5
item	I wear gloves	1	2	3	4	5
	I wear a gown/apron	1	2	3	4	5
	I send them for testing if they report one symptom	1	2	3	4	5
	i send them for testing if they report more one symptom	1	2	3	4	5

6. Please circle one answer for each item	When recommended safety procedures are NOT followed, please rate how often you think that each of the following reasons play a role.	Never	Less than half of the time	Half of the time	More than half of the time	Always
, reem	Not enough time/too much work	1	2	3	4	5
	2. poor availability of proper equipment	1	2	3	4	5
	3 Lack of proper space	1	2	3	4	5
	4 Do not feel the risk requires it	1	2	3	4	5
	5. Peer pressure	1	2	3	4	5
	6 Not trained well enough	1	2	3	4	5
	7 Proper supervision not provided	1	2	3	4	5
	8 Not supported by my manager	1	2	3	4	5
	9 Other (please specify)	1	2	3	4	5

If you have any other comments or suggestions, please write them in the space provided below:

\_\_\_\_\_

Thank you for your time and your answers!

#### **Survey instrument**

Invitation message:

Dear colleague,

This survey aims to identify the most common occupational risks for health and safety of health workers and the measures for their prevention in the context of the ongoing pandemic of Corona Virus Infectious Disease (COVID-19).

In this survey we are interested in health and safety of all health workers - all people engaged in the promotion, protection or improvement of the health of the population. This includes health workers involved in direct patient care, both formal an informal, in public and private facilities, including traditional medicine, as well as other assisting and supporting staff, including administration, management, ambulance drivers, public health workers, community health workers and others.

The survey is intended for health workers, managers and practitioners providing services for protecting the health and safety of workers in health facilities. The results will be used to inform action at all levels for improving the protection of health and safety of health workers in the ongoing response to COVID-19.

The survey has been developed by an international multi-disciplinary group of experts convened by the World Health Organizations and the International Labour Organisation and should take approximately 7 minutes to complete.

Your answers are completely anonymous, and the data will be processed and analysed in a way that will not link your answers to your identity.

### 1. In which country do you usually work?

[Drop down list of countries in the world]

# 2. Your gender? [select one]

- Female
- Male
- Other
- Prefer not to answer

# 3. What is your primary area of work? (select one only))

- occupational and environmental health
- infection prevention and control
- management and human resources
- mental health and psychosocial support
- public health

- patient care (medicine, nursing, midwifery, dentistry)
- allied health professional
- community health worker
- support staff cleaner, driver, food worker

- administration and clerical support
- pharmacy

• Other > please specify

# 4. You work most of the time for: (select one only)

- national government
- sub-national (provincial, district)
- healthcare facility hospital, primary health-care centres, isolation camp
- social care facility (e.g. nursing home, home care)
- local community
- business enterprise or farm
- academia, research
- professional association
- trade union
- employers' association /hospital federation
- other

**5.** Think about the working conditions of health workers in your country, jurisdiction or health facility - those that you are most familiar with. Below is a list of the most common risks for health and safety health workers.

6.

**7.** How would you rate the level of these risks, <u>now during the COVID19 pandemic?</u>

Health and Safety Risks for Health Workers	Risk is negligible	Risk is acceptable for a short time	Risk is not acceptable at all	Don't know/Unsure
<ol> <li>Exposure to blood, body fluids, respiratory secretions, and other potentially infectious materials</li> </ol>				
<ol> <li>Skin damage from personal protective equipment and/or frequent hand hygiene</li> </ol>				
<ul><li>3. Thermal discomfort (cold, heat, humidity)</li><li>4. Needlesticks and sharps injuries</li></ul>				
<ul><li>5. Slips, trips, and falls</li><li>6. Back injury from manual handling oof patient and</li></ul>				
heavy objects  7. Bullying or psychological harassment at the workplace				
8. Sexual harassment  9. Physical violence and assaults				
10. Time pressure, high workload				
<ul> <li>11. Crowded workplace</li> <li>12. Hazardous chemicals, such as drugs, disinfection and sterilization agents</li> </ul>				
13. Shift work with night shifts				
14. Regular long working hours (more than 48 hours a week)				
15. Insufficient time-off duty to rest (less than 11 hours between shifts)				
16. Insufficient access to safe drinking water				
17. Inadequate sanitation facilities				
<ol> <li>Insufficient facilities for personal hygiene (shower and menstrual hygiene)</li> </ol>				

Health and Safety Risks for Health Workers	Risk is negligible	Risk is acceptable for a short time	Risk is not acceptable at	Don't know/Unsure
			all	
Other, please, specify				

**8.** Think again about the working conditions of health workers in your country, jurisdiction or health facility - those that you are most familiar with. Below is a list of the most common measures for prevention of risks for health and safety of health workers. How would you rate the level of application of these measures according to your knowledge of the real situation <u>now during the COVID-19 pandemic?</u>

Preventive measures	Measure does	Measure exists and	Measure exists	Don't
	not exist at all	offers some	and offers full	know/Unsure
		protection to some	protection for	
		workers	all workers at	
			risk	
1. Policy for infection prevention and control in the health				
facility facility				
2. Processes for triage of patient in place at the emergency				
room, including early detection and isolation of				
infectious patients				
3. Routine assessment of the risk of exposure to body				
substances or contaminated surfaces before any health				
care activity and use of appropriate measures for				
personal protection				
4. Regular environmental clean-up and disinfection				
<ol><li>Immunization of health workers</li></ol>				
6. Reporting of incidental exposures to blood, body fluids,				
or respiratory secretions				
7. Policies in place for post-exposure prophylaxis, such as,				
for HIV, Hepatitis B				
8. Facilities for hand hygiene (hand washing and				
disinfection) are readily available				
9. Provision of personal protective equipment, such as				
masks, gloves, goggles, gowns are readily available				

Preventive measures	Measure does	Measure exists and	Measure exists	Don't
	not exist at all	offers some	and offers full	know/Unsure
		protection to some	protection for	
		workers	all workers at	
			risk	
10. Training and education of workers about infection				
prevention and control				
11. Occupational safety and health policy and management				
system in the facility				
12. Regular assessment of workplace health and safety risks				
and controls				
13. Engineering controls, such as ventilation, physical				
barriers, safer devices				
14. Prevention of workplace violence and security measures				
15. Workplace policies for the prevention of bullying,				
psychological and sexual harassment				
16. Ergonomic workplace design and furniture				
17. Devices for patient handling and lifting of loads				
18. Management of working time, rest and recuperation				
19. Human resource management of safe staffing and				
<mark>workload</mark>				
20. Medical surveillance and monitoring of health workers				
21. Medical first aid kits				
22. Psycho-social support and counselling				
23. Consultations between management and workers				
regarding health and safety at work				
24. Training and education of workers about occupational				
safety and health				
25. Other, please, specify				