Status update on elements of the current Healthcare Worker COVID-19 RNA/PCR testing strategy in Ireland

Dr Lorraine Doherty
National Clinical Director Health Protection
1st July 2020

This report is a status update on elements of the HCW testing strategy, which have been agreed by NPHET. The report covers:

1. **The alert to all HWS and plan for SARS-CoV-2 testing of HCWs who are rotating from areas of higher prevalence from July 2020.**
2. **An Interim update on the enhanced epidemiological review of selected hospital outbreaks of COVID-19.**
3. **An early update on HPSC commissioned report on enhanced epidemiological data relating to most recent COVID-19 cases in HCWs.**

The update on the First Week of serial SARS-CoV-2 testing of HCW in nursing homes is presented in a separate paper.

Section 1

1. Status update - alert to all healthcare workers (HCWs) and plan for SARS-CoV-2 testing of HCWs who are rotating from areas of higher prevalence from July 2020

1.1. COVID-19 Testing Protocol for all NCHDs for July 2020 Changeover

Approved by: Dr Lynda Sisson, National Clinical Lead in Workplace Health and Wellbeing
Approval Date: 29th June 2020
Issue Date: 29th June 2020

Introduction

The annual Non-Consultant Hospital Doctor (NCHD) post changeover will commence on Monday 13th July 2020. In the context of COVID-19, and in line with National Public Health Emergency Team (NPHET) advice, all Healthcare Workers (HCWs) rotating to new posts should complete a COVID-19 Healthcare Worker Relocation Self Risk Assessment (see Appendix 1) and may require testing prior to changeover. Testing consists of SARS-CoV2 polymerase chain reaction (PCR) (swabbing). Additional local arrangements may apply, which require NCHDs to be tested in advance of commencing employment as part of the Hospital Group/Community Healthcare Organisation (CHO) management of COVID-19 in the workplace.

Process Timeline

Monday 29th June 2020

- The self risk assessment will be emailed to all NCHDS via DIME.
- All NCHDs should complete the self-risk assessment and upload the document to the Occupational Health module, Immunisation section of their National Employment Record, NER. Further guidance on using your NER account can be found at: *Portal Quick Step User Guide* .
- NCHDs should follow the guidance at the end of the self risk assessment.
- NCHDs relocating from an area of higher COVID-19 endemicity to an area of lower endemicity should be tested by their existing Occupational Health Service before changeover. Areas of higher endemicity include CHO 6, 7 and 9 and all Dublin Hospitals. NCHDs relocating from Residential Care Facility (RCF) posts to hospital posts should also be tested. NCHDs, who fit the criteria set out for testing, should contact their existing Occupational Health Service during the week commencing Monday 29th June to request testing in the week prior to changeover.
- NCHDs with any further queries following completion of the self risk assessment should contact their existing Occupational Health Service prior to changeover.

Monday 6th July 2020

- Testing will be ordered by NCHDs' existing Occupational Health Services during the week commencing Monday 6th July.
- NCHDs who test positive for COVID-19 will be advised to self-isolate and should contact their new Occupational Health Service by phone to inform them of this result.

Monday 13th July 2020

- NCHD post changeover commences.

Contact details for existing Occupational Health Services can be found at: workwell.ie/contact-list/contact-your-local-occupational-health-service/ or by emailing hr.wellbeing@hse.ie.

COVID-19 Healthcare Worker Relocation Self Risk Assessment

Name (print): _____ Current Job title: _____

Date of Birth: _____ Mobile phone no: _____

Moving from: _____ Moving to: _____

	Please Tick	
	Yes	**No**
1. Symptoms - within past 14 days, have you experienced:		
• Fever/Chills/Sweating		
• Shortness of breath		
• New/Worsening cough		
• Sore throat		
• Malaise/Aches		
• Loss of taste or smell		
• Vomiting/Diarrhoea		
2. Recent exposure (within past 14 days) - workplace or other		
• Unprotected contact with a confirmed or probable case		
• Advised to restrict your movement in the past 14 days?		
• Advised to self-isolate in the past 14 days?		
• Working under derogation in the past 14 days		
3. Travel/Relocation		
• Travel within 14 days from outside the island of Ireland		
• Relocation from another region of the country		

• Relocation from a Residential Care Facility post to a hospital post		
4. Previous Test		
• No positive COVID-19 test within the past 3 months. (if tested within past 3 months with a 'COVID-19 detected' result, please tick **NO** and enter the date symptoms began here - _____)		

1. If you have any of the symptoms listed in Section 1, please self-isolate and contact your existing Occupational Health Service or your GP for assessment and possible testing.
2. If you had unprotected contact (appropriate Personal Protective Equipment not worn) with a confirmed or probable case within 14 days before your start date, have been identified as a 'close contact' and are restricting movement as a result, you will be tested at day 0 and day 7. Please advise your new Occupational Health Service.
3. If you have travelled from outside the island of Ireland within 14 days before your start date, you must self-isolate for 14 days from the date of return. Testing is not required unless you develop symptoms. Please advise HR of your travel and the requirement to self-isolate.
   If you are relocating from an area of higher endemicity to lower endemicity, or from a Residential Care Facility post to a hospital post, you should be tested* by your existing Occupational Health Service before you transfer. Areas of higher endemicity include CHO 6, 7 and 9 and all Dublin Hospitals. Please contact your existing Occupational Health Service to request a test 1 week prior to transfer. Please contact your new Occupational Health Service by phone to inform them of any positive results.
   However, if you have had known or possible contact with COVID-19 patients, please also request testing.
4. If you have tested positive within 3 months and are asymptomatic, you can be considered immune for 3 months from onset of symptoms (in original infection). However if you become symptomatic you must self-isolate and report to your Occupational Health Service.

You can find contact details for your local Occupational Health Service at: workwell.ie/contact-list/contact-your-local-occupational-health-service/ or by emailing hr.wellbeing@hse.ie.

*testing consists of SARS-CoV2 PCR (swabbing)

Signature: _____ Date: _____

1.2. Memo on COVID-19 Testing Protocol for July 2020 NCHD Changeover

Memo Approved by: Dr Lynda Sisson, National Clinical Lead in Workplace Health and Wellbeing
Approval Date: 29th June 2020
Issue Date: 29th June 2020

Dear Colleagues,

As you are aware, the NCHD post changeover will commence on Monday 13th July 2020. In the context of COVID-19, and in line with NPHET advice, all Healthcare Workers (HCWs) rotating to new posts must complete a COVID-19 Healthcare Worker Relocation Self Risk Assessment and may require testing prior to changeover. This self risk assessment will be emailed to all NCHDs on Monday 29th June. NCHDs should upload the completed self risk assessment to the Occupational Health module of their National Employment Record (NER).

For example, NCHDs relocating from an area of higher COVID-19 endemicity to an area of lower endemicity, should be tested by their existing Occupational Health Service before changeover. Areas of higher endemicity include CHO 6, 7 and 9 and all Dublin Hospitals. We are asking these NCHDs to contact their existing Occupational Health Service to request a test 1 week prior to changeover. Testing should take place during the week commencing Monday 6th July.

The testing consists of SARS-CoV2 PCR (swabbing). Additional local arrangements may apply, which may require NCHDs to be tested in advance of commencing employment as part of the Hospital Group/CHO management of COVID-19 in the workplace.

Kind regards,

Lena

Dr Lena Murphy, MRCPI, MICGP

Specialist Registrar in Occupational Medicine
Workplace Health and Wellbeing Unit, HSE, 63/64 Adelaide Road, Dublin 2

Section 2

2. Status update - enhanced epidemiological review of selected hospital outbreaks of COVID-19

Interim report prepared by: Dr Lois O'Connor on behalf of the hospital outbreak group

NOTE: The enhanced epidemiological review of selected hospital outbreaks of COVID-19 is incomplete. This report comprises a status update only, in the context of ongoing work in this regard.

2.1. Background

Since the beginning of the COVID-19 pandemic in Ireland, there have been 102 outbreaks of COVID-19 in acute hospitals. The outbreaks have varied considerably in magnitude and complexity. Recently, a COVID-19 testing strategy for acute hospitals has been developed by a multidisciplinary expert group. This strategy includes a suite of recommendations that are designed to improve the knowledge around, and understanding of, SARS-CoV-2 infection in hospital-based HCWs in Ireland and inform future testing strategies in this area. NPHET has agreed that the 10 recommendations included in the strategy should be implemented without delay. This project relates to recommendation 6 of the testing strategy and is an enhanced epidemiological review of selected hospital outbreaks.

Recommendation 6

HSE will undertake enhanced epidemiological studies of 6 current hospital outbreaks of COVID-19, 5 of which are occurring in larger Dublin hospitals where community prevalence is currently higher than the rest of the country, to better understand sources of infection, chains of transmission and risk factors for infection. This will include additional targeted testing of all HCWs who have any link with the outbreak affected areas/wards in the hospital and also further testing of other HCWs in those hospitals based on Public Health risk assessment.

This project will focus on the first component of this recommendation as the identified hospital outbreaks had been closed at the time of this report.

2.2. Aim

To describe selected hospital outbreaks in order to better understand key factors that influenced the outbreaks including; sources of infection, transmission chains, risk factors for infection, testing of HCWs and outbreak control measures.

2.3. Methodology

A mixed methods approach was taken.

Quantitative data was collected from the following data sources;

- the national surveillance system – Computerised Infectious Disease Reporting (CIDR) system
- regional public health departments
- hospital outbreak control teams
- occupational health teams

Qualitative data was collected through informal meetings with outbreaks control team members and regional public health colleagues and through reviewing of existing draft outbreak reports. Suggested themes to guide the discussion with outbreak control teams included:

- outbreak and case identification
- outbreak testing strategy
- occupational health and staff factors including
    - Human resource issues – inadequate staffing, workload
    - Personal protective equipment (PPE) issues e.g. shortages
    - Housekeeping issues– cleaning, waste management, signage
    - Staff exposures issues – delays in case detection, worker derogations, contact tracing, self-isolation
    - Social distancing/physical spacing challenges
    - Communications issues
- Laboratory issues – e.g. access to testing, interpretation of test results, benefits of onsite testing
- outbreak control measures

    - what was most effective
    - what was less effective
- overall challenges
- useful lessons to be shared
- what would you do differently

All identifying data was anonymised.

The epidemiology of the outbreaks is described in aggregate form. Qualitative data is presented under the thematic headings described above.

2.4. Results

Six acute hospital outbreaks were chosen to be part of the review. To date, data is available on three of these outbreaks.

Overview of the outbreaks

Table 1 Overall description of the outbreaks (n=3)

	Range
Total number of cases	3-115
Number of cases in patients	3-40
Number of cases in healthcare workers	0-66
Number of units affected	1-8

Duration of outbreak (days)	31-64

HCW data

Information on HCW cases, transmission routes and HCW testing is awaited.

Outbreak control measures

In all three outbreaks, an outbreak control team (OCT) was convened and a suite of outbreaks control measures were recommended. These included closure of the ward to admissions, minimising patient transfers between wards and cohorting of patients within the ward. Movement of staff between the affected wards and other areas of the hospital was kept to a minimum, though this was challenging in one outbreak. PPE use and enhanced cleaning were recommended. In one outbreak, screening of staff and patient close contacts was undertaken and ultimately all patients on the ward were screened.

Qualitative Themes

Having clear, comprehensive hospital guidelines for the management of COVID-19 patients and their contacts was noted as important.

Outbreak and case identification

It was agreed that early identification of an outbreak was a key factor in mitigating risk within the hospital. Initial recognition of the outbreak within the hospital was delayed in one instance, impeding rapid control of the outbreak. In addition, adopting a low threshold for testing inpatients facilitated early identification of an outbreak.

Outbreak testing strategy

In the early stages of the pandemic, restricted case definition and a lack of clarity regarding testing in outbreaks was challenging. Similarly, while laboratory capacity was being expanded, the considerable delay between testing and the availability of results hampered outbreak management. As the pandemic progressed, later hospital outbreaks operated a more extensive testing strategy.

Laboratory issues

As mentioned previously, the delay in turn-around time between testing and the availability of results caused difficulties in outbreak management. Conversely, as testing capacity increases, access to on-site testing for staff facilitates rapid outbreak assessment and containment.

Occupational health

The COVID-19 pandemic has highlighted gaps in the occupational health service. One hospital did not have access to an Occupational Health Physician and was insufficiently resourced from an occupational health perspective. This resulted in a number of issues; occupational health were unable to closely monitor staff, rapidly risk assess staff for derogation and provide advice to derogated staff who continued to work while identified as a close contact of a COVID-19 case. In one outbreak, there was confusion regarding the difference between staff being well enough to work and staff being safe to work. It was noted that an essential component of outbreak control was ensuring that symptomatic staff did not attend work, regardless of symptom profile.

Additional challenges

Other challenges that were highlighted included; difficulties regarding reconfiguration of the hospital into COVID and non-COVID areas. Minimising the movement of patients and staff during an outbreak was identified as an important factor in minimising risk during an outbreak. However, this was challenging when agency staff were required to fill staffing gaps. Environmental cleaning issues and inappropriate PPE use were also identified. The importance of a COVID lead within the hospital was highlighted as an important factor to ensure a cohesive approach to the outbreak.

What worked well

The rapid identification of all close contacts of cases and early introduction of control measures was important. From a testing perspective, rapid access to on-site testing of staff samples and a low threshold for testing inpatients for COVID-19 were key. The availability of comprehensive hospital guidelines for the management of COVID-19 patients and contacts was also helpful.

2.5. Conclusions

It is difficult to draw conclusions from such a small number of outbreaks. The final report will be more comprehensive. Lessons were learned as the pandemic evolved and practices changed within the hospitals. The following factors were identified as key in minimising the impact of a hospital outbreak; early identification of cases including having a low threshold for testing inpatients, minimising movement of staff and patients within the hospital, having a comprehensive testing approach including access to on-site testing with rapid turn-around time and early introduction of outbreak control measures.

Section 3

3. Status update – HPSC commissioned report on enhanced epidemiological data relating to most recent COVID-19 cases in HCWs

3.1. Steering Committee membership

Chair: Dr. Sarah Doyle, Medical Officer of Health, Clinical Lead, National Contact Management Programme
Lead Investigator: Professor Mary Codd, Associate Dean of Public Health, School of Public Health, Physiotherapy & Sports Science (SPHPSS), University College Dublin (UCD)
Members: Dr. Lynda Sisson, Specialist in Occupational Medicine, National Clinical Lead in Workplace Health and Wellbeing

Dr. Lois O'Connor, Specialist in Public Health Medicine, Health Protection Surveillance Centre, HSE
Observers: Mr. John Ahern / Mr. Niall Hayden, Vision Consulting

3.2. Introduction

This enhanced investigation of HCWs is being undertaken to address the following recommendation of the *'COVID-19 RNA/PCR testing in Acute Hospitals in Ireland, Public Health Recommendations on Strategic Approach Action Plan, June 2020'* (1), and was requested by NPHET on 11th June 2020.

Recommendation 8
The HSE (the Contact Management Programme (CMP) with Occupational Health Services) will undertake an enhanced investigation of the most recent HCWs COVID-19 infections (last 150 cases) to gather data regarding:

i. the setting in which affected HCWs work,
ii. their scope of practice,
iii. PPE use,
iv. whether they were working in a setting with an ongoing COVID-19 outbreak,
v. whether they work across healthcare settings,
vi. their accommodation arrangements (if possible to collect this information – e.g. is overcrowding an issue, do they live with other HCWs working in the acute/community sector) etc.

Action: HSE CMP and Occupational Health, should lead this enhanced investigation with advice on methodology from HPSC. This should be complete by end June 2020.

On receiving notification of this required action, Dr. Sarah Doyle, MOH, Clinical Lead, Contact Management Programme (CMP), established a Steering Committee and requested Professor Mary Codd, UCD Contact Tracing Centre, CMP, to conduct the investigation on behalf of the CMP. The investigation is being conducted under the Infectious Disease Regulations, 1981.

This is an ongoing collaborative project between the CMP, UCD HSE Occupational Health and the HPSC. Due to the tight timeframe,

this is a preliminary report prepared for the meeting of NPHET on 2nd July 2020. It is subject to further analysis and interpretation by the Steering Committee. The Steering Committee will meet next week to consider further analysis, discuss the findings, reach conclusions, and make recommendations.

The purpose of the investigation is to ascertain, in so far as is possible, the circumstances of ongoing coronavirus infection among healthcare workers (HCWs) in Ireland. It relates to all HCWs recently affected during the pandemic, not just those working in acute hospitals.

3.3. Methods

HCWs to be included in the review were identified from two sources: (1) the National Contact Management Programme (CMP) database known as the CovidCare Tracker (CCT) system; and (2) HCWs previously contacted by the UCD CTC. A total of 463 HCWs were identified. They comprise HCWs in public and private healthcare facilities, who tested positive for coronavirus from **13/05/20** to **09/06/20** inclusive and whose case records were fully resolved and completed at time of identification. It is estimated that this may be approximately half of those who tested positive during this time.

The data requested for this enhanced investigation were more detailed than those collected during initial contact tracing. Thus, HCWs were, with permission of the Medical Officer of Health (MOH), contacted by telephone to collect the required information.

Calls were made by experienced callers in the UCD CTC comprising faculty members from public health, nursing, occupational safety and health, physiotherapy, dietetics/nutrition, veterinary medicine and agricultural sciences. A bespoke Caller Script was developed. Callers were oriented to the purpose of the review and the revised Caller Script before undertaking calls. Medical and Public Health expertise was on hand to address any
queries or issues which arose in the course of calls.

All data were recorded on a specific case report form (CRF). Variable definitions and numeric coding options for each variable were documented in a data dictionary (DD). All data were entered into a bespoke Excel-based database for analysis. Data were analysed using SPSS Version 24 (6). Electronic data are held in a secure, password protected database, accessible only to the core investigating team and overseen by the Lead Investigator. Case report forms are retained in a locked file and secured room. On completion of the analysis and

report, the most recent version of the CCT system (V.09, 11 June 2020) will be updated by the UCD Team with the variables that can entered to it. Data to be added to the CIDR system will be extracted from the CCT and transferred to the HPSC, for input into CIDR.

The dataset will be retained in a secure manner for a period commensurate with completion of the report, including addressing any queries arising from the report REMOVE. The final destination for the dataset will be decided by the Steering Committee, and will be incompliance with legislation, and with HSE guidance on data retention.

3.4. Results

3.4.1. HCWs interviewed

Of the 463 HCWs identified for the review, 400 (86%) were successfully contacted and interviews successfully completed. This necessitated a total of over 800 call attempts. Reasons for failure of calls and/or non-completion of interviews are outlined in **Table 1** with the number of final accessible HCWs provided.

Table 1: HCWs identified and available for Enhanced Surveillance interview

	n	(%)
Total HCWs records received	**468**	
• Duplicate records	5	
HCWs available for Interview	**463**	**(100%)**
Unsuccessful and/or Incomplete Calls	**63**	**(14%)**
• Invalid Telephone Number / Wrong person	9	
• Call successful, but not completed at request of HCW	8	
• HCW could not be reached despite repeated attempts	46	
Total completed HCW Interviews	**400**	**(86%)**

3.4.2. Demographic characteristics of HCWs

The demographic characteristics of HCWs contacted are provided in **Table 2**. Of note is that 71% are female and 47% are non-Irish. The most common ethnic group after Caucasian (59%) was Asian (15%).

Of those born outside Ireland, the length of time they had lived in Ireland ranged from approximately 6 months to over 40 years, with a median of 15 years. The majority (61%) had travelled to Ireland for work. The largest group were from the Philippines (12%; n=48).

Table 2: Enhanced Surveillance of HCWs: Demographic Characteristics of HCWs

		Mean	(SD)
Age (Years)	Range (18.8 - 67.3)	39.2	(11.2)
		n	(%)
Gender	Male	99	(25%)
	Female	282	(71%)
	Other / Unknown	18	(5%)
Nationality	Irish	209	(52%)
	Non-Irish	187	(47%)
Ethnicity	Caucasian	236	(59%)
	Asian	61	(15%)
	Indian	33	(8%)
	Black African	35	(9%)
	Mixed / Not specified / Unknown	35	(9%)
Length of time in Ireland (Median, Range)		**15 yrs (6mths – 40yrs)**	
Reasons for coming to Ireland (n=181)		n	%
• For Work		111	(61%)
• Family in Ireland		39	(22%)
• For Education		12	(7%)
• Seeking Asylum / Other / Unknown		19	(10%)

3.4.3. Testing for COVID-19, self-isolation and return to work

Table 3 presents a summary of the number of tests for COVID-19, how results were received and whether their Line Manager was informed. Also given are the HCW responses to the time to self-isolate and recover from COVID-19, whether or not they completed the requisite isolation period and their return to work.

Table 3: Enhanced Surveillance of HCWs: Testing, Isolation and Return to Work

	Median	Range
Number of tests for COVID-19	1	(1 - 5)
Informed of positive test result by:	**n**	**(%)**
• Occupational Health	103	(26%)
• Contact Tracing Centre / HSE by phone	161	(40%)
• Line Manager	52	(13%)
• Informed as an inpatient in Hospital	33	(8%)
• General Practitioner	22	(6%)
• Other / Unknown	29	(7%)
HCW informed Line Manager of their result		
• Yes	351	(88%)
• Line Manager knew already	8	(2%)
• No / Unknown / Missing	41	(10%)
Allowed time off to self-isolate and recover from COVID-19	382	(96%)
Reported to have completed the requisite isolation period	378	(95%)
Length of time off work altogether (days)	**Median**	**Range**
	21	(0-84)

The source of information for 40% of HCWs was from a Contact Tracing Centre or HSE Public Health; 26% were informed by their Occupational Health department and 13% by their Line Manager. A further 8% were notified while an inpatient in hospital.

Of particular note is that 96% of respondents were given time off work to self-isolate and recover from COVID19; a similar proportion indicated that they completed the requisite isolation period. However, closer examination of the time off work revealed that, while the median time off was 21 days (Range: 0 - 84):

- 3% returned to work at 7 days; a further 32% returned between 8 and 14 days;
- 18% returned to work at 14-21 days, with a further 15% at 21-28 days.
- 32% remained off work for more than 4 weeks.

3.4.4. Clinical features, health conditions and living circumstances

The profile of symptoms associated with COVID-19 is given in **Table 4.** The most common symptoms were fatigue (44%) and headache (38%), Fever, cough and loss of taste and/or smell were symptoms in one-third of cases; 30% maintained they were symptom-free. Very few had underlying health conditions; 9% are smokers. The vast majority (80%) indicated full recovery from the illness.

Table 4: Enhanced Surveillance of HCWs: Symptoms, Health Conditions & Recovery

	n	(%)
Symptoms of COVID-19		
• Fever (> 38 Degrees C)	131	(33%)
• Cough	131	(33%)
• Shortness of breath	88	(22%)
• Headache	153	(38%)
• Myalgia	144	(36%)
• Sore throat	80	(20%)
• Runny nose	59	(15%)
• Loss of smell and/or taste	133	(33%)
• Loss of appetite	94	(24%)
• Nausea / diarrhoea	68	(17%)
• Fatigue	**175**	**(44%)**
• Generally unwell	108	(27%)
Underlying health conditions		
• Asthma requiring medication	31	(8%)
• Diabetes Mellitus	16	(4%)
• Smoker	36	(9%)
Current Status		
• Still unwell or status unknown	76	(19%)
• Fully recovered	320	(80%)

In relation to accommodation and living conditions, 80% of HCW live in a house while 16% live in an apartment. Approximately one-third live alone or with one other person, 60% live in groups or families of 3-6, with a few (<5%) living in crowded conditions. A majority (n=314; 79%) could self-isolate when they needed to.

3.4.5. Scope of work: healthcare facilities and occupations

Table 5 outlines current place(s) of work, contractual arrangements and Agency work.

Table 5: Enhanced Surveillance of HCWs: Current Place of Work, Employment, Agencies

	n	(%)
Acute Hospitals	**155**	**(39%)**
Long Term Residential Care Settings	**207**	**(52%)**
• Nursing Home / Long Stay Units	133	(33%)
• Mental Health Facility	23	(6%)
• Centre for Disability (Residential)	32	(8%)
• Other Residential Institution	19	(5%)
Community Settings	**38**	**(10%)**
Contractual arrangements		
• Permanent	290	(73%)
• Temporary	51	(13%)
• Part time / Hourly / No Contract	16	(4%)
Works with Agency as Emergency/Replacement HCW	28	(7%)

Healthcare professionals are grouped into those who have direct contact with patients and other health-related occupations who do not (**Table 6).** The two largest groups in this investigation are nurses (37%) and HCAs/Carers (32%).

Table 6: Enhanced Surveillance of HCWs: Scope of Work (Occupation)		
	n	**(%)**
OCCUPATIONS WITH DIRECT PATIENT CONTACT		
Doctor / Physician Assistant	23	(6%)
Nurse / Midwife	149	(37%)
Healthcare Assistant / Carer / Attendant	126	(32%)
Professions Allied to Medicine	39	(10%)
• Phlebotomist / Physiotherapist / OT		
• Dietician / Radiographer / Social Care Worker		
OTHER HEALTH-RELATED OCCUPATIONS		
• Laboratory Personnel / Porter / Administrative / Security	20	(5%)
• Catering / Cleaning / Domestic Staff	22	(5%)
• Other	21	(5%)

3.4.6. Scope of practice: work-related activities

Table 7 provides a detailed outline of the scope of practice undertaken by HCWs interviewed. Principal among them are Activities of Daily Living (ADL), clinical observations and physical examination. These are especially important in view of the immediate proximity of HCWs and patients and the increased risk of transmission of virus from one to the other.

One-third of the HCWs are involved in aerosol-generating procedures, with examples and frequencies given. Just **70%** of HCWs indicated that they wear the protective filter masks during these procedures.

Table 7: Enhanced Surveillance of HCWs: Scope of Practice		
Scope of Practice Activities (Duties)	**n**	**(%)**
• Clinical Observation	197	(49%
• Physical Examination	191	(48%
• **Activities of Daily Living**	**260**	**(65%**
• Intellectual Disability Care	99	(25%
• Physical Disability Care	129	(32%
• Medication Administration	153	(38%
• Diabetes Care	105	(26%
• Critical Care (ICU)	36	(9%)
• IV Care (IV Flushes / Fluids)	87	(22%
• Phlebotomy	84	(21%
• Pre/Post-operative Surgical Care	63	(16%
• Surgical Practice	33	(8%)
• Palliative Care	93	(23%
• Mental Health Care	96	(24%
• Addiction Services	21	(5%)
• Domestic Duties	81	(20%
• Driving / Escorting Duties	38	(10%
• Catering	71	(18%
• Portering / Security	12	(3%)
Aerosol-generating Procedures	**125**	**(31%**
• Non-invasive ventilation, e.g. nebuliser / Oxygen Rx	92	(23%
• Cardiopulmonary Resuscitation	59	(15%
• Tracheostomy	31	(8%)
• Tracheal Intubation	22	(6%)
• Bronchoscopy	13	(3%)
Wears an FFP2/FFP3 mask during aerosol-generating (of those who carry out aerosol-generating procedures)	**88/1**	**(70%**

3.4.7. Infection control practices

A series of questions about Infection Control Procedures (IPC) were asked of HCWs. The results are given in **Table 8.**

Training in IPC has taken place 60% of the facilities represented, though 75% of the HCWs indicate that they have attended an IPC training course. Most of the training took place in conjunction with increased vigilance regarding COVID-19. Just half of the HCWs report that they practice hand hygiene between patient encounters. Just under half say that surfaces are decontaminated between patient encounters.

Table 8: Enhanced Surveillance of HCWs: Infection Control Procedures (IPC)

	n	(%)
Training in Infection Control Procedures		
• Has your healthcare facility had training in IPC ?	244	(61%)
• Have you attended an IPC training course?	298	(75%)
• If yes, when did you attend it? **(242 responses)**	**Jan / Feb**	**13%**
	Mar / Apr	**63%**
	May / June	**18%**
• How long did the IPC training take?	< 2 hrs	(60%)
Infection Control Practices		
• Do you perform hand hygiene between each patient? Yes	196	(49%)
• Are surfaces decontaminated between patient encounters? Yes	179	(45%)
Potential for Isolation		
• Is there a specific area in your HC Facility for COVID-19 patients? Yes	276	(69%)
• Are there dedicated STAFF for COVID patients? Yes	229	(57%)
• Are you a part of a dedicated COVID-19 team? Yes	110	(28%)

3.4.8. PPE

HCWs were asked about the availability, and their use of and use of personal protective equipment (PPE). Just over half think that the PPE available to them is appropriate. Two-thirds have always had some PPE at their facility. Given the diversity and scope of the work in healthcare and in different HC settings, and the importance of PPE to infection control, this may warrant additional attention, comparing practices in different settings.

Table 9: Enhanced Surveillance of HCWs: Personal Protective Equipment (PPE)		
	n	**(%)**
Availability of PPE		
• Is there appropriate PPE available in your workspace? Yes	217	(54%)
• Have you always used PPE in this HC Facility? Yes	267	(67%)
PPE Practices		
Is it usual to change PPE between each patient encounter?		
• Yes, Always	250	(62%)
• Yes, Sometimes	52	(13%)
• No	17	(4%)
• Don't Know	40	(10%)
• Missing	41	(10%)
PPE Training		
• Have you attended an IPC training course?	320	(80%)
• How long did the IPC training take?	< 2 hrs	(47%)

Table 10 outlines the frequency with which specific pieces of PPE are used if recommended by the facility

Table 10: Enhanced Surveillance of HCWs: Recommendation & Use of PPE					
	R*	**Always 100% time**	**Often >50% Time**	**Infrequently <50% Time**	**Never 0%**
Surgical Masks	98%	80%	14%	3%	2%
FFP2 / FFP3	61%	41%	9%	8%	42%
Eye Protection	73%	51%	14%	9%	26%
Apron / Gown	89%	68%	15%	7%	10%
Surgical gloves	93%	75%	15%	4%	7%
Face Shield / Visor	67%	44%	13%	10%	34%

3.5. Comments

By virtue of the very tight timeframe, the findings presented in this report are preliminary. There are a number of additional analyses that may be of benefit, including comparisons between HCW roles and between facilities of different types, to better understand aspects of disease transmission and provide best evidence for prevention and control. There is also an opportunity to integrate a considerable body of qualitative information based on the discussions with the HCWs, many of whom were eager to share their experiences and thoughts.

Data from the HPSC relating to ongoing outbreaks in facilities in which HCWs who partook in this investigation will be incorporated into the final report.
A comprehensive analysis of the findings by the Steering Committee, with consideration of conclusions and recommendations will be undertaken, to inform the final report.