Disclaimer: We kindly ask to acknowledge that due to the diverse and heterogeneous nature of the questions and the dynamic pandemic situation some of the information might be incomplete or only correct for the time being. Thus, please consider the date and date of the last update with the below information. All available information was provided by a country representative from the PHIRI network during or in connection to the respective meeting.

Date: 08.11.2021 Last update: 10.11.2021

Table 1: Part 1: Country response: Health of HCW

Country	Monitoring the health of HCW	Factors/indicators regarding the protection of HCW	Is data on the health of HCW collected routinely in your country?
Albania	Regular monitoring is only being done for vaccination uptake. Additionally, some data exist on infection rates, but it is not published yet.		Vaccination uptake by HCW only
Austria	To our knowledge there is no regular health monitoring of HCW, only a few individual studies or surveys. A survey of HCW between June and August 2021 with almost 7.000 participants. Assessed items included workload, depression, anxiety and problems with sleeping, memory or focusing. The survey also asked participants whether they were thinking about changing jobs. Find results here (in German): https://offensivegesundheit.at/wp-content/uploads/2021/10/Gesamtergebnisse-Online-Umfrage-wee2%80%9Elch-glaub%E2%80%98-ich-Krieg%E2%80%98-die-Krise.pdf		No
	Like any other infectious disease, COVID-19 may be registered as an occupational disease for individuals who face increased exposure at their workplace. The responsible social security agencies have registers with the numbers of HCW who have done so.		
	A series of articles aimed at understanding the psychosocial burden of the pandemic on HCW mainly summarised international data and results from previous epidemics and crises but also included some personal interviews. https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0249 in German: https://diglib.uibk.ac.at/ulbtirolhs/content/titleinfo/5773852/full.pdf		





	https://www.clemens-	
	hausmann.at/images/2020_12_Juen_et_al_Empfehlungen_fuer_die_ps	
	<pre>ychosoziale_Unterstuuetzung_des_Krankenhauspersonals_Dezember%</pre>	
	<u>202020.pdf</u>	
	https://www.asanger.de/zeitschriftzppm/online-archiv/2021/heft-3-	
	2021.php#018415ad9b0f5f909	
Belgium	There is no detailed information on regular monitoring available. A	No
	study to describe the effects on social and mental health of HCW	
	working in Belgian hospitals is ongoing. The first results are expected for	
	the end of 2021.	
Czech	Aware of daily reporting only on infections among HCW. In general,	Incidence among HCW only
Republic	occupational diseases are registered in a common data space. There are	
	basic recommendations from clinical psychologists for HCW, especially	
	for paramedics, physicians, and other frontline workers. Further	
	information at the following link:	
	https://covid.gov.cz/en/situations/psychological-help/mental-hygiene-	
	frontline-workers.	
Estonia	A national health survey with interviews among vulnerable groups and	Yes
	HCW is ongoing. There is a continuous monitoring of data in HCW along	
	the 3 waves (EE is still in the third wave).	
Ireland	The Workplace Health and Wellbeing Unit in the Irish national health	
	service (Health Service Executive) have undertaken a great deal of work	
	over the last 18 months in response to COVID. In more recent months	
	they produced a Country Vignette with WHO Europe which provides an	
	overview of Ireland's work to promote the health and well-being of	
	healthcare workers during the pandemic:	
	https://www.euro.who.int/en/countries/ireland/publications/ireland-	
	promoting-the-health-and-well-being-of-the-health-and-care-	
	workforce-2021. The report also includes some useful lessons learned	
	for other countries.	
	In regards to monitoring of HCWs health, we will follow up with more	
	specific details. We track absence data regularly as part of the national	
	workforce reports, which are available here:	
	https://www.hse.ie/eng/staff/resources/our-workforce/workforce-	
	reporting/national-reports.html	
	A shorter can also serviced and brownson and the land and the state of the	
	A study was also carried out by researchers in Ireland that looked at	
	burnout in emergency department staff during COVID-19. The study was	
	carried out in the emergency departments of two major hospitals in	
	Ireland during December 2020. The researchers used a standardised	





	instrument to assess burnout among staff, and found that burnout was identified in almost ¾ of participants. It should be noted however that the sample size was small. Link to study: https://link.springer.com/article/10.1007/s11845-021-02795-w		
Italy	Most of information and monitoring for HCW are available at the web site of the National Institute for Insurance against Accidents at Work at the following link: https://www.inail.it/cs/internet/risultati_ricerca.html?textToFind=COVID-19+ed+operatori+sanitari (in Italian language); following some examples: A work on Stress management and burnout prevention in healthcare professionals in the covid-19 emergency: https://www.inail.it/cs/internet/docs/alg-pubbl-gestione-stress-operatori-sanitari-covid-19 6443145764145.pdf (in Italian language); A retrospective study on health care workers resulted positive to COVID 19 was published on March 2021 and it is available at following link: https://www.inail.it/cs/internet/docs/alg-pubbl-monitoraggio-operatori-sanitari-studio.pdf (in Italian language); COVID-19 and protection of healthcare workers was also published from the National Institute for Insurance against Accidents at Work: https://www.inail.it/cs/internet/docs/alg-pubbl-covid-19-operatori-sanitari1 6443145028706.pdf;	Studies focus not only on 'physical health' but especially on psychological support and managing of stress (https://www.inail.it/cs/internet/risultati_ricerca.html?textT_oFind=COVID-19+ed+operatori+sanitari_(in Italian language)	Yes
Netherlands	The IZZ Foundation (a collective of health care workers, representing ~20% of all HCW) in collaboration with Utrecht University investigates how working in healthcare is experienced and how this relates to health and well-being via the 'Monitor healthy working in healthcare' (https://www.izz.nl/zorgorganisaties/monitor). This is done annually, (but) for a period of 5 years, the 2021 monitor is the fourth year. 2021 Monitor infographic, in Dutch: https://www.izz.nl/sites/default/files/downloads/IZZ%20Monitor%2020 21%20infographic 2.pdf And report, in Dutch: https://www.izz.nl/sites/default/files/downloads/Resultaten%20IZZ%20 Monitor%202021 2.pdf	Absence from work, Informal care given by HCW, Use of care, Chronic complaints (physical and mental exhaustion, sleeping problems, enthusiasm/passion) • 81% of healthcare workers worry about corona • 18% were infected with Covid-19 last year; 47% had long-term complaints. This is a quarter more than the national average (37%). • 1 in 7 care workers often or always feel exhausted; The high workload, poor leadership and an unhealthy working climate are the biggest culprits. • 1 in 4 employees sleeps poorly. • Yet they are enthusiastic/passionate: 70% are brimming with energy. • The organizational climate and leadership have the most influence on the health of healthcare workers.	Yes



		Absenteeism is monitored on RIVM's website: https://www.volksgezondheidenzorg.info/onderwerp/arbeidsmarkt-zorg/inzet-zorgmedewerkers	
Poland	Regular data is being conducted only on HCW vaccinated. There are measures undertaken in workplace safety and special guidelines elaborated. There is no national strategy, however, some initiatives are being undertaken to provide free assistance of mental health specialists for HCW in need. It is estimated that 60% of doctors and nurses suffer from burn out syndrome. Local initiatives aiming at providing mental health assistance or dedicated phonelines, however, without a national strategy. The common situation is difficult due to general protests of HCW.		Vaccination uptake by HCW only
Portugal	In PT, the Ministry of Health monitors the health among HCW. So far, 34.000 persons of the health care force were identified who have been infected, which is around 40% of health care workers in general. 10% among this group are nurses, but they were the first once vaccinated, so this particular group is maybe more protected.		Yes
Slovakia	Protection of any employee or worker is given by Constitution and Labour law, monitoring is conducted by National labour inspectorate, adherent agenda is performed by Public health authority. Environment, workload, exposure to heat/cold, hazardous agents of any kind are considered. There is nothing specific about HCW compared to other employment (with regard to examples offered). Mental disorders caused by profession belong to the care of occupational medicine, most of them are preventable by correct management of Human resources		No
Slovenia	Slovenia regularly (daily) monitors the incidence of Covid-19 among HCW: https://www.nijz.si/sites/www.nijz.si/files/uploaded/tedenski prikaz o kuaeni 20211101.xlsx	There have been some research regarding mental health of HCW: - PSYCHOLOGICAL EFFECTS OF THE COVID-19 PANDEMIC ON HEALTH WORKERS available at https://ibmi.mf.uni-lj.si/rehabilitacija/vsebina/Rehabilitacija_2021_S1_p163-166.pdf - Problems that healthcare workers in northeastern Slovenia may face during the COVID-19 epidemic available at https://www.ukc-mb.si/media/files/assets/uploads/UKC_Babiska_nega_2021_BILTEN.pdf - Sleep and work of physicians during Covid-19 epidemic, available at https://repozitorij.uni-lj.si/lzpisGradiva.php?id=124146⟨=slv	Incidence among HCW only





Spain	During the first wave of the pandemic, regions and medical colleges	The MINDCOVID project fund by the Carlos III Health	Incidence among HCW only
Spaili	have set up specific helplines to support and attend citizens, patients,	Institute (ISCIII) has studied the mental health (anxiety,	includence almong riceve only
	health professionals and social care workers directly or indirectly	depression, panic disorder, suicide behaviour) of	
	affected by COVID-19. From March to May 2020, the Ministry of Health	healthcare professionals and other vulnerable groups, as	
	and the Spanish General Council of Psychology set up the service of first	well as in patients with COVID-19 and in a sample of the	
	psychological help (Servicio de Primera Ayuda Psicológica (SPAP)), a	general Spanish adult population. The baseline assessment	
	phone line to provide early psychological advice to COVID-19 patients.	consisted of anonymous self-reported web-based surveys	
	https://www.mscbs.gob.es/biblioPublic/publicaciones/recursos propios	administered shortly after the first outbreak of COVID-19 in	
	/resp/revista_cdrom/VOL94/C_ESPECIALES/RS94C_202010138.pdf	Spain (9,138 participants). Data collection was initiated in	
	//CSP/Tevista_culonify vols4/e_lsr EciALLS/N354e_202010130.pui	May 2020 and finished in April 2021.	
	The Spanish Epidemiological Surveillance Network (RENAVE) publishes	More details: https://www.mindcovid.org/home	
	every week an epidemiological report where the number of infections	more details. Inteps,//www.minucovid.org/nome	
	among healthcare professionals and the percentage of healthcare	An interesting observational cohort study based on the	
	professionals and social care workers infected by COVID-19 are	SEMI-COVID-19 Registry from the Spanish Society of Internal	
	reported.	Medicine (SEMI) determined whether healthcare workers	
	Last publication (3rd November 2021) - e.g. table 6 and figure 7- in	(HCW) hospitalized in Spain due to COVID-19 at the	
	https://www.isciii.es/QueHacemos/Servicios/VigilanciaSaludPublicaREN	beginning of the pandemic have a worse prognosis than	
	AVE/EnfermedadesTransmisibles/Documents/INFORMES/Informes%20C	non-healthcare workers (NHCW). The main findings of the	
	OVID-19/INFORMES%20COVID-	study were that hospitalised HCW had less severe COVID-19	
	19%202021/Informe%20n%C2%BA%20103%20Situaci%C3%B3n%20de%	and lower mortality.	
	20COVID-	https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7894924/p	
	19%20en%20Espa%C3%B1a%20a%203%20de%20noviembre%20de%20	df/pone.0247422.pdf	
	2021.pdf)	**	
	In addition, on the first wave of the pandemic (from March to May	As of 4 February 2021, COVID-19 has been given the	
	2020), there were specific reports addressing the infections in health	consideration of occupational disease for healthcare	
	care professionals	workers and social care workers infected during their job	
	https://www.isciii.es/QueHacemos/Servicios/VigilanciaSaludPublicaREN	duties. In this way, health and social care workers get	
	AVE/EnfermedadesTransmisibles/Paginas/InformesCOVID-19.aspx	covered for their whole life in case of any disease or	
		eventuality stemmed from the COVID-19 infection, not only	
		for five years as it had been previously issued by law when	
		COVID-19 was considered as a work accident (Royal Decree	
		3/2021 https://boe.es/diario_boe/txt.php?id=BOE-A-2021-	
		<u>1529</u>).	
United	There has been quite a lot of work on protecting HCWs in the UK - a		Vaccination uptake by HCW only
Kingdom	paper is under submission: COVID-19 Vaccine Uptake, Effectiveness, and		
	Waning in 93,000 Health Care Workers: A national prospective cohort		
	study in Wales.		
	Also a HCW risk assessment tool was developed in Wales:		
	https://gov.wales/covid-19-workforce-risk-assessment-tool. MIND - a		
	3rd sector organisation developed interventions to protect MH:		





https://www.mind.org.uk/information-support/coronavirus/.	
In England the UKHSA developed a workplace safety assessment tool for	
vulnerable workers: https://www.mind.org.uk/information-	
support/coronavirus/	