Legal Aspects of Recognizing COVID-19 As an Occupational Disease in The Republic of Croatia

MILAN MILOŠEVIĆ*
HANA BRBOROVIĆ
ROKO ŽAJA
NEDA PJEVAČ
University of Zagreb, School of Medicine,
Andrija Štampar School of Public Health,
Zagreb, Croatia

JASNA PUCARIN-CVETKOVIĆ
University of Zagreb, School of Medicine,
Andrija Štampar School of Public Health,
Croatian Institute of Public Health,
Zagreb, Croatia

NADA PJEVAČ
Health Centre Zagreb,
Zagreb, Croatia

TAJANA BOŽIĆ
Polyclinic Dr. Zora Profozić,
Zagreb, Croatia

SNJEŽANA KAŠTELAN
University of Zagreb, School of Medicine,
Clinical Hospital Dubrava,
Zagreb, Croatia

Occupational diseases are diseases directly induced by work and working conditions. In the Republic of Croatia, according to the procedure set out by law, occupational diseases are reported and recognized by the Croatian Health Insurance Fund and registered and monitored in the Registry of Occupational Diseases kept by the Croatian Institute for Public Health – Department of Occupational Health. Diagnoses are under responsibility of occupational medicine specialists and are carried out according to modern occupational

∗ Lead author: Associate Professor Milan Milošević, MD, PhD, Occupational and Sports Medicine specialist; milan.milosevic@snz.hr
Corresponding author: Assistant Professor Hana Brborović, Occupational and Sports Medicine specialist; hana.brborovic@snz.hr
University of Zagreb, School of Medicine, Andrija Štampar School of Public Health / Sveučilište u Zagrebu, Medicinski fakultet, Škola Narodnog Zdravlja “Andrija Štampar”, Johna Davidstona Rockfellera 4, 10000, Zagreb, Croatia / Hrvatska
health criteria, which include determining the clinical picture of the disease and the damage caused by the work process. The recognition of COVID-19 as an occupational disease is extremely important for the worker considering the financial and pension benefits according to the applicable laws and regulations. Most workers who have had COVID-19 as a professional disease do not get the disease recognized as an occupational disease while they are sick. The length of the acute disease is shorter than the process of application and evaluation of occupational disease. However, the recognition of COVID-19 as an occupational disease may be important for the future. Should any of the complications (e.g. post COVID-19 syndrome) arise in the future, the worker holds their rights under health insurance. The scientific and healthcare community is still in the process of evaluating and recognizing complications of COVID-19 disease and their long-term impact on health and work ability.

Key words: occupational disease, legislation, public health, occupational medicine.

INTRODUCTION

Occupational diseases are diseases directly induced by work and working conditions. In the Republic of Croatia, according to the procedure set out by law, occupational diseases are reported and recognized by the Croatian Health Insurance Fund and registered and monitored in the Registry of Occupational Diseases kept by the Croatian Institute for Public Health – Department of Occupational Health. The Compulsory Health Insurance Act (OG 80/13, 137/13, 98/19) defines professional diseases as diseases caused by prolonged direct impact of work processes and working conditions on certain affairs (Official Gazette, 2013). Diagnosis and recognition of occupational diseases is a complex and lengthy process that requires special knowledge of medicine and other areas related to health and safety at work. Diagnoses are under the responsibility of occupational health specialists and are carried out according to modern occupational health criteria, which includes determining the clinical picture of the disease and the damage caused by the work process (Croatian Institute of Public Health - Department for Occupational Health, 2021b).

Being in good health and improving health benefits individuals, employers, wider society and the national economy. The most effective interventions aim to improve work quality, employee health and occupational health support; promote active labour market programmes and sustainable and equitable economic growth; and integrate lifelong learning into work and health policies (Boyce & Mustajbegović, 2019). The current health crisis caused by the pandemic of the new infectious disease COVID-19 points us to several challenges in the field of health and safety at work in the Republic of Croatia, including the administrative problem of reporting and recognising occupational diseases caused by COVID-19. At the beginning of April 2020, an amendment to the Regulation on Infectious Diseases completely removed all administrative barriers to the recognition of occupational diseases caused by COVID-19 infection (Croatian Health Insurance Institute, 2021). According to the provisions of the Compulsory Health Insurance Act in Croatia, occupational diseases are diseases caused by a longer direct impact of the work process and working conditions on certain jobs (Official Gazette, 2007). Occupational dis-
eases in Croatia are covered by mandatory health and mandatory pension insurance. Benefits are paid from mandatory health insurance in case of temporary incapacity for work, while benefits in case of disability and physical impairment are paid from pension insurance (Croatian Health Insurance Institute, 2021).

Eurostat releases a statistical report on the legal status of COVID-19 as an accident at work and/or an occupational disease at the national level, following an EU-wide survey launched in November 2020. Such recognition is a determinant factor in insurance cases. According to the survey results, all 27 EU countries consider the occupational risk of COVID-19. However, there are differences on how the file will be investigated (accident at work and/or an occupational disease) and which sectors and occupations are included in this possible recognition (limited to the health sector or extended to other sectors). The survey shows that 17 EU countries recognise COVID-19 as an occupational disease (Bulgaria, Cyprus, Croatia, Czechia, Estonia, France, Hungary, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Poland, Portugal, Romania, Slovakia and Sweden), while Italy, Slovenia and Spain see it as an accident at work. Depending on national criteria, Austria, Belgium, Denmark, Germany and Finland can consider it an accident at work or an occupational disease. Greece and Ireland also associate it with work, but do not specify if it can be considered an accident at work or an occupational disease. The report, reflecting the situation of June 2021, also includes information on economic sectors and occupations involved and the national criteria applied. While in some EU countries it is potentially possible to recognise the COVID-19 risk in all economic sectors and occupations, the recognition can be done only in specific economic sectors and occupations. The survey was launched among national statistical authorities producing the European Accidents at Work Statistics (ESAW) and the European Occupational Diseases Statistics (EODS) (European Commission, 2021b).

The aim of this paper is to present the procedure for recognizing COVID-19 as an occupational disease in the Republic of Croatia and the possible legal aspects of that recognition.

**COVID-19 AS AN OCCUPATIONAL DISEASE IN CROATIA**

The list of occupational diseases, jobs in which these diseases occur and the conditions under which they are considered as occupational diseases are determined by the Law on the List of Occupational Diseases (Official Gazette, 1998) and The Law on Amendments to Law on the List of Occupational Diseases (Official Gazette, 2007). Only those diseases on the official list are considered as occupational diseases, and jobs in which occupational diseases occur are considered jobs in which workers are exposed to chemical, physical and biological hazards and stresses from the List of Occupational Diseases.

The Law on Amendments to the Law on the List of Occupational Diseases (Law) under item 45 contains: “Infectious or parasitic diseases caused by work in activities where an increased risk of infection has been proven”, which is applicable to the reporting and recognition of COVID-19 as an occupational disease. Article 2 of this Law defines an occupational disease and the conditions under which these diseases are considered occupational diseases:

“(1) An occupational disease is a disease for which it is proven that it is a consequence of harmful effects in the work process and / or work environment, or
a disease which is known to be a consequence of harmful effects related to work process and / or work environment, and the intensity of the harm and the duration of exposure to that harm is at a level known to cause damage to health.

(2) Occupational diseases referred to in Paragraph 1 of this Article shall be proven by means of treatment programs (algorithms) accepted in occupational medicine, and the diagnostic procedure shall include: 1) work history and proving the connection between the disease and exposure at work; 2) clinical picture with the appearance of impaired function and / or morphology of organs or organ systems that are known to cause certain occupational hazards; 3) positive findings of diagnostic methods that can objectify this damage.

(3) The presence of harmfulness referred to in Paragraph 1 of this Article shall be determined: 1) by hazard assessment or in another way that enables the presence of harmfulness to be determined with certainty, 2) by determining intensity, measuring, direct insight into working conditions or in another way enabling to determine with certainty the intensity of harmfulness) and the duration of exposure to that harmfulness.”

The highest number of reports of occupational disease caused by COVID-19 infection are expected among health care workers, but it is also possible in other professions that are necessary for the functioning of the state in a pandemic (for example, police officers, border guards, education, traders and other service industry working during pandemic).

A worker who is diagnosed with an infectious disease caused by COVID-19, and who works at a workplace where they believe that there is an increased risk of COVID-19 infection, should contact the occupational health specialist (OHS) who is in charge of their workplace by phone or in person (if the worker is cured or COVID-19 negative). OHS will submit the necessary documentation and diagnostic procedure will be carried out in accordance with Article 2, Paragraph 2 of the Law (Kerner & Macan, 2020).

1) The diagnostic procedure begins with an inspection of the medical documentation that proves that the worker suffers from an infectious disease caused by COVID-19

- Laboratory documentation in accordance with the taken biological material for detection of infection (nasal and pharyngeal swab, nasopharyngeal aspirate, bronchoalveolar lavage, sputum, serum) – PCR testing;
- Clinical documentation - findings of an infectologist and / or other medical findings as needed.

2) The procedure continues by proving the connection between the disease and exposure in the workplace, which includes:

a) Taking a detailed work history directly or indirectly through an official job description (Form 2 IN) or an excerpt from a risk assessment document for the job in question, with:

- A list attached by the employer with the employee’s duties performed and business trips abroad if there were any in the period of one month before the onset of symptoms, or a statement that the employee was exposed to COVID-19 at work for a period of one month before the onset of symptoms diseases;
- Data on the use of protective equipment during work in the period of one month before the onset of symptoms of the disease.
b) Taking a detailed personal history and confirmation from the family physician about other diseases or insight into the personal health records if it is not possible to conduct a worker inspection.

c) Taking an epidemiological history of COVID 19 family members and other contacts outside the workplace, information on non-working days and private trips in the period of one month before the onset of symptoms of the disease (in the form of a written statement workers if it is not possible to conduct an examination of workers).

After reviewing the above documentation, OHS will complete the procedure for diagnosing an occupational disease, i.e. give an opinion on the existence of an occupational disease (Croatian Society of Occupational Health, 2021).

The Register of Recognized Occupational Diseases from the Department for Occupational Health of the Croatian Institute of Public Health covers all recognized occupational diseases received through the regional offices of the Croatian Health Insurance Institute. The occupational etiology of these diseases is confirmed by the occupational and sports medicine specialists of the Department of Occupational Health of the Croatian Institute of Public Health and recognized by the Croatian Health Insurance Institute (Croatian Institute of Public Health - Department for Occupational Health, 2021). Namely, according to the provisions of the legislator, within the framework of the procedure for diagnosing each occupational disease, confirmation and registration is carried out in the Department of Occupational Health of the Croatian Institute of Public Health. In this way, all recognized occupational diseases in the Republic of Croatia are registered in this Register. This procedure for the recognition of occupational diseases, determined by the Law on Compulsory Health Insurance (OG 80/13, 173/13, 98/19), allows for the full registration and monitoring of all occupational diseases at the national level (Croatian Institute of Public Health - Department for Occupational Health, 2021a). The scope and quality of data of the Registry of Occupational Diseases is in accordance with Croatian legislation (Law on the List of Occupational Diseases) and with the criteria of Statistics of the European Union (EODS). The last published Register is for year 2020 and, according to the frequency of the total number of officially recognised and reported occupational diseases, infectious or parasitic diseases caused by work in activities where there is an increased risk of infection (e.g. health and social care sector) are in the first place. Specifically, in 2020, due to the pandemic of the SARS CoV-2 virus, it was expected that the largest number of occupational diseases would be related to SARS CoV-2 virus. The total number of recognized occupational diseases caused by SARS CoV-2 virus was 180 and the ratio to the total number of recognized occupational diseases was greater than 80% (180/223). The average age of the patients was 44.8 years, and the length of work tenure was 17.5 years (Croatian Institute of Public Health - Department for Occupational Health, 2021c).

As it is seen, health and social care sector are predominately (more than 85%) represented in COVID-19 caused occupational disease. The majority of these workers are doctors and nurses who were working with COVID-19 positive patients. Even if a worker is without symptoms, but with positive PCR findings, it is considered as an occupational disease. Currently the Croatian Society of Occupational Health and School of Medicine University of Zagreb is developing an on-line diagnostic tool in the diagnosis of COVID-19.
as an occupational disease among healthcare professionals (Zaja, Kerner, Macan, & Milosevic, 2021).

According to the preliminary results of the characteristics of work-related COVID-19, Croatian hospital nurses and laboratory technicians have reported their COVID-19 to occupational health physician most commonly in order to have their disease recognized as an occupational one. The most common COVID-19 symptoms among healthcare workers were general weakness and fatigue, elevated body temperature and decreased sense of smell. When it comes to the recognition procedure, Croatian healthcare workers usually submitted medical documentation properly, but with a lack of work documentation (employer statement about occupational exposure to SARS-CoV-2, job description), which delays or disables recognition eventually (Zaja, Kerner, Macan, et al., 2021; Zaja, Kerner, Milosevic, & Macan, 2021).


The number of recognised occupational infectious diseases in relation to the total number of occupational diseases in the period from 2015 till 2020 briefly demonstrates a significant increase of occupational diseases caused by infectious agents through this period, mostly due to COVID-19 infections. Unfortunately, up to this date the official data for 2021 were still not published, but extremely huge final numbers are expected (Figure 1).

Figure 1
The number of recognised occupational infectious diseases in relation to the total number of occupational diseases in period from 2015 till 2020

![Graph showing the number of occupational infectious diseases in relation to the total number of occupational diseases from 2015 to 2020.]

Source: (Croatian Institute of Public Health - Department for Occupational Health, 2021c).
LEGAL ASPECTS OF RECOGNIZING COVID-19 AS AN OCCUPATIONAL DISEASE

The Occupational Safety Act is an “umbrella law”, published in 2014 in the Official Gazette 71/14, and subsequent revisions 118/14, 94/18, 96/18 (Official Gazette, 2014), and is in accordance with the International Labour Organization. The Occupational Safety Act regulates the system of occupational safety in the Republic of Croatia, and in particular national policies and activities, general principles of prevention and rules for occupational safety, obligations of the employer, rights and obligations of workers and commissioners of workers for occupational safety, activities related to occupational safety, surveillance and wrong responsibility. The purpose of the Act is to systematically improve the safety and health protection of workers and persons at work, to prevent occupational injuries, occupational diseases and other diseases that are related to work (Zayzon & Kuhl, 2020).

In the case of an occupation disease, workers are insured not only if they are employed or self-employed, but also if they are members of a special group of insured persons for whom insurance is provided. These are, for example, pupils and students during practical training, vocational practice, study tours, and members of voluntary fire departments during fire-fighting activities. No prior insurance is required to be eligible for benefits in the case of an accident at work or an occupation disease. This holds true for benefits when incapacitated for work, i.e. sickness, as well as when claiming disability pension, professional rehabilitation and survivor’s pension. The procedure for determining and recognizing an illness as an occupational disease is initiated by submitting a form “Application for an occupational disease” which is submitted to the regional office or regional office of the Croatian Health Insurance Institute that is competent according to the place of residence or stay of the insured person or of the employer. The application is submitted by the employer or a person who independently performs personal activity and the organizer of certain jobs and activities referred to in Article 16 of the currently valid Compulsory Health Insurance Act (Croatian Health Insurance Institute, 2021; European Commission, 2021a).

The application can be submitted “ex officio” or at the request of a sick worker, i.e. an insured person who is provided with rights in the event of an occupational disease pursuant to this Act. If the employer, i.e. the organizer of certain activities and jobs does not submit an application for an occupational disease, the application must be submitted by the selected doctor of general / family medicine at the request of the injured or ill insured person or at the proposal of the competent doctor of occupational medicine with whom the Croatian Health Insurance Institute has concluded a contract on the implementation of specific health care for workers, which is responsible for the implementation of specific health care for workers according to the seat of the employer, i.e. the organizer of certain activities and jobs (Croatian Health Insurance Institute, 2021).

An application for recognition of an occupational disease and determination of the right to compulsory health insurance due to an occupational disease may also be submitted by the ill-insured person himself, or by a family member in the event of the death of the insured person. The deadline for submitting an application for an occupational disease or application is 8 days from the day when the insured person received a document from a health institution or doctor’s office in private practice included in the network of contracted oc-
ocupational medicine entities, which diagnosed him with an occupational disease. An insured person for whom an application for an occupational disease has not been submitted to the Croatian Institute within three years from the expiry of the aforementioned period loses the right to initiate the procedure for determining and recognizing an occupational disease by the Croatian Health Insurance Institute (Croatian Ministry of Health, 2015).

Under health insurance, workers may also claim the following due to an occupational illness:

- Screenings and diagnostic procedures as part of specific healthcare at a specialist doctor chosen by the employer. If they are self-employed, they can choose their own doctor,
- In the case of suspicion of an occupational disease, proceedings must be instituted at the competent local office of the Croatian Health Insurance Fund (HZZO). This is done by employer and chosen primary health care doctor,
- Sick leave is dealt with by your chosen primary healthcare doctor.
- Travel costs can be claimed by applying to the competent local office of the HZZO.

Within the pension insurance system, workers may be entitled to a disability pension, occupational rehabilitation and impairment benefit.

The recognition of COVID-19 as an occupational disease is important for the worker. Most workers who have had COVID-19 as professional disease do not get the disease recognized as an occupational disease while they are sick. The length of the acute disease is shorter than the process of application and evaluation of occupational disease. However, the recognition of COVID-19 as an occupational disease may be important for the future. Should any of the complications arise in the future, the worker holds their rights under health insurance (as mentioned above). The scientific and healthcare community is still in the process of evaluating and recognizing complications of COVID-19 disease and their long-term impact on health and work ability. Working conditions in Croatia regularly generate health disorders that significantly impair not only the work capacity, but also the quality of life of workers and thus affect the quality of life of the whole family (Croatian Ministry of Health, 2015).

CONCLUSION

COVID-19 disease in the health care and social work activities is the most common occupational disease in 2020. The reasons for this dynamic can be found in the global pandemic of SARS-CoV-2 viruses, which appeared in 2020 and had enormous proportions. Since it is the health sector that is the first to be affected for the diagnosis and treatment of patients, it is expected that the largest number of patients would be in this sector. It is significant that patients return to the system of work after recovery, but since we do not yet know the extent of the impact of this disease, we cannot know if there will be subsequent sick leaves due to the consequences of COVID 19 disease survivors. It is easiest to “measure” the effect of working conditions in the form of occupational diseases because the system of identifying occupational diseases in Croatia is exact, the list of occupational diseases is of a closed type and there is a clear demarcation between the changes in health caused solely by harms and efforts from the working environment in relation to diseases related to work. Additionally, occupational diseases
generate costs in the form of treatment and sick leave even many years after their recognition. The huge numbers of COVID-19 positive workers who were recognised as suffering from an occupational disease can seriously increase these costs in the future.

Currently, there are no legal possibilities to achieve additional rights if the person who developed COVID-19 at the workplace had a more severe form, i.e. post-COVID-19 syndrome, and has an impaired ability to work longer than expected.

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Milan Milošević, Hana Brborović, Roko Žaja, Neda Pjevač
Sveučilište u Zagrebu, Medicinski fakultet,
Škola narodnog zdravlja “Andrija Štampar”,
Zagreb, Hrvatska

Jasna Pucarin-Cvetković
Sveučilište u Zagrebu, Medicinski fakultet,
Škola narodnog zdravlja “Andrija Štampar”,
Hrvatski zavod za javno zdravstvo,
Zagreb, Hrvatska

Nada Pjevač
Dom zdravlja Zagreb,
Zagreb, Hrvatska

Tajana Božić
Poliklinika dr. Zora Profozić,
Zagreb, Hrvatska

Snježana Kaštelan
Sveučilište u Zagrebu, Medicinski fakultet,
Klinička bolnica Dubrava,
Zagreb, Hrvatska


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