## Notification of occupational diseases in the Republic of Croatia: the impact of COVID-19[[1]](#footnote-1)

*Cvetan Kovač, Ivana Krišto, Ana Šijaković*

Abstract

Diagnosis of occupational diseases is an interdisciplinary process that requires special knowledge of medicine and other areas related to health and safety at work. So too is their diagnosis and treatment the responsibility of occupational health specialists. The recognition of occupational diseases in Croatia is regulated by the Law on the List of Occupational Diseases, while diagnosis is 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. 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.

**Keywords**: COVID-19, occupational disease, workers’ unions, reporting regulations, social dialogue

### Introduction

The incidence of coronavirus-related diseases in Croatia is part of the worldwide CV-19 outbreak causing severe acute respiratory syndrome (SARS–CoV-2). The first case in Croatia was reported on 25 February, while the first recovery was reported on 12 March and the first death from the coronavirus on 18 March. In Croatia, there are 2,247 confirmed cases and 104 deaths (data as at 8 June 2020).

### Occupational diseases in the Republic of Croatia – legislative framework

*The Compulsory Health Insurance Act* (OG 80/13, 137/13 and 98/19) defines occupational diseases as those related to a longer-term direct impact of the work process and working conditions in certain jobs.

The *Law on the List of Occupational Diseases* (OG 162/98) and its amendment (OG 107/07) define an occupational disease as one that is proven to be the result of damaging effects in the work process and/or work environment, where the intensity of the damage and the duration of exposure to it are at a level known to cause damage to health. The List of Occupational Diseases and the jobs in which these diseases occur, as well as the conditions under which they are considered occupational, is binding and an integral part of the Act (OG 107/07).

Occupational diseases are proven by the use, in occupational health, of particular treatment programmes. The diagnostic procedure includes:

1. work history and proof of the connection between the disease and exposure at work
2. the clinical picture with the appearance of impaired function and/or the morphology of organs or systems that are known to be caused by certain occupational hazards
3. positive findings of the diagnostic methods that can objectify this damage.

Additionally, the presence of damage is determined by:

1. risk assessment; or another way that enables the presence of the damage to be determined with certainty
2. assessing intensity (gaining direct insight into working conditions; or in another way that enables the intensity of the damage to be determined with certainty) and the duration of exposure to that damage.

Very often, practice does not distinguish occupational diseases from other work-related diseases. In both cases, the removal of occupational hazards is the only way to prevent the occurrence of both occupational diseases and other work-related illnesses.

Given the different responsibilities of employers for occupational diseases, almost all European Union countries have accepted the principle of the division proposed at the international symposium organised in 1992 by the International Labour Organization (ILO) on occupational diseases and work-related illnesses, in Linz. According to the conclusions of the working group established following that symposium, diseases are classified into the following groups concerning the harmfulness of the workplace:

1. occupational disease – the disease arose as a direct and only consequence of exposure to harmful effects in the workplace. Almost all members of the ILO have accepted, with minor corrections, the List of Occupational Diseases issued and recommended by that organisation. The Republic of Croatia is one of those that has accepted the ILO recommendations in this area and has drawn up its own List of Occupational Diseases
2. work-related illnesses – these are illnesses in which damage via the workplace is one (but never the only one) of many causal factors. In contrast to occupational diseases, the Law on Occupational Safety of the Republic of Croatia mentions illnesses only in Article 3(2), which states, ‘work-related illnesses are diseases caused by several factors, one of which is work,’ and in Article 25(1), which states:

Injury at work and occupational disease suffered by the employee while performing work for the employer is considered to originate from work and the employer is responsible for it according to the principle of strict liability.

#### Register of Recognised Occupational Diseases

*The Register of Recognised Occupational Diseases* (Croatian acronym: CNIPH) is kept at the Department for Occupational Medicine and Occupational Health of the Croatian Institute of Public Health (CIPH) as one of the important public interest activities that this institution carries out on behalf of the Ministry of Health. The Register maintains the list of occupational diseases which are recognised as such at the level of the state and thus provides a basis for preventive action in the field of the protection of health of the working population.

The Register analyses the number of occupational diseases in Croatia and their trends; the characteristics of sick workers (age, gender, length of service, education); the economic activities and occupations in which occupational diseases are found; and the harmful conditions or types of damage that are caused by an occupational disease. Its analysis is carried out according to the Croatian regulations and is in line with European Occupational Diseases Statistics (EODS). The Register also includes an analysis of the duration of temporary incapacity for work of workers suffering occupational diseases.

#### Procedure for identifying and recognising occupational diseases

The procedure for determining and recognising occupational diseases is carried out based on a received application under the provisions of the *Law on the List of Occupational Diseases* (OG 162/98) and its amendment (OG 107/07); the *Compulsory Health Insurance Act* (OG 80/13, 137/13 and 98/19) and the *Regulation on the rights, conditions and manner of exercising compulsory health insurance rights in the event of an injury at work or an occupational disease* (OG 75/14, 154/14, 79/15, 139/15, 105/16, 40/17, 66/17, 109/17, 132/17, 119/18, 41/19, 22/20 and 39/20).

*The Register of Recognised Occupational Diseases* includes all recognised occupational diseases received via the regional offices of the Croatian Health Insurance Institute. According to the legislation, the occupational background of these diseases has to be confirmed and registered by an occupational health specialist, i.e. the Occupational Medicine Service of the Croatian Institute of Public Health, and consequently they are recognised by the Croatian Health Insurance Institute. This procedure for the recognition of occupational diseases, determined by the Compulsory Health Insurance Act, enables the full registration and monitoring of all occupational diseases at national level.

According to the provisions set out in these legal regulations, where an occupational disease is suspected, a *Report on Occupational Disease* is compiled and submitted to the regional office of the Croatian Health Insurance Fund (HZZO), according to the location of the employer’s registered office. In the process of establishing the facts to recognising an occupational disease, obtaining the opinion of a competent doctor, occupational health specialist and the Department for Occupational Medicine is a mandatory requirement. The task of the Department’s occupational health specialists is to confirm or eliminate whether or not the disease had an occupational cause. If an occupational cause of the disease can be confirmed, all data relevant to the disease and the level of occupational exposure are entered in the Register of Recognised Occupational Diseases, in line with the Croatian legislation as well as EU recommendations in the field of the statistical monitoring of workplace health and safety parameters.

#### Conducting the procedure and deciding on an occupational disease

As a rule, HZZO decides on the recognition of an occupational disease by certifying the form of the application received. Exceptionally, HZZO may be obliged to issue a written decision, in the case of the non-recognition of an occupational disease, when deciding on whether an application made by a worker should be recognised.

When an occupational disease has been determined, the operative part of the decision must settle on a specific disease, indicating the date of its occurrence, the designation according to the International Classification of Diseases and the record number of the recognised occupational disease. In all cases, the procedure for recognising an occupational disease is treated as an emergency procedure.

The decision recognising an occupational disease is issued by the competent regional office of HZZO, while an appeal can be filed against the decision with the HZZO Directorate. An appeal is not allowed against the second-instance decision of that Directorate but an administrative dispute may be initiated against it.

### Protection of workers who are temporarily or permanently incapable of work due to occupational diseases

Article 38 of the Labour Law (Croatian acronym: ZOR) (OG 93/14, 127/17, 98/19) stipulates that the employment of a worker who has contracted an occupational disease may not be ended by the employer during is or her temporary incapacity for work during treatment or recovery from an injury at work or an occupational disease. Furthermore, the recognition of an occupational disease must not adversely affect the advancement of workers and the exercise of other rights and benefits from employment or arising in connection with employment (Article 39).

A worker who has been temporarily incapable of work due to an occupational disease and for whom, after treatment or recovery, an authorised professional determines that he or she is fit for work has the right to return to the job held beforehand. If the need to perform that job has ceased, the employer is obliged to offer the worker a contract to perform other appropriate jobs which must, as far as possible, correspond to the job at which the employee previously worked. If the employer is unable to offer the employee such a contract, or if the employee refuses it, the employer may terminate the employment in the manner and under the conditions prescribed for under the Labour Law.

Under Article 40, a worker who has been diagnosed with an occupational disease is entitled to additional occupational training where there has been a change in technology or mode of work, as well as to all other benefits arising from such improvements to the conditions of work.

#### Insurance rights based on having a recognised occupational disease

After the diagnosis and recognition of an occupational disease, workers can exercise – among others – certain rights arising from the basics of health insurance and pension insurance.

##### Health insurance rights

The rights that arise from Croatia’s basic health insurance system where there is an occupational disease, according to the Health Insurance Act and its associated regulations, primarily include the right to health care and the right to financial compensation.

The right to health care includes the right to:

* primary health care
* specialist-consular protection
* hospital health care
* the right to medicines
* the right to dental and prosthetic care
* the right to orthopaedic aids.

Based on the recognition of an occupational disease, workers within the compulsory health insurance system are entitled to salary compensation during temporary incapacity for work of 100 per cent of base salary for a maximum uninterrupted period of 18 months after the diagnosis. After the expiry of this period, the level of compensation drops to 50 per cent of the last-paid salary for as long as there is a medical indication of temporary incapacity.

The worker is also legally entitled to the reimbursement of transport costs in connection with exercising health care rights, as well as the reimbursement of funeral expenses. The payment of these rights is the responsibility of the Croatian Health Insurance Institute.

##### Pension insurance rights

Workers are able to realise more favourable financial conditions via the pension insurance system where their occupational disease has permanently reduced their capacity for work. Additionally, depending on severity and the type of occupational disease, workers may be entitled to injury compensation. Furthermore, in exercising pension insurance rights, special procedures can be initiated:

* determining disability
* determining bodily harm
* determining general incapacity for work
* initiating the right to occupational rehabilitation.

These rights are all exercised via the Croatian Pension Insurance Institute.

### Dynamics of the incidence of occupational diseases

In the most recent period, the total number of occupational diseases has gradually decreased, from a peak of 488 in 2011 to 106 in 2015, followed by a slight increase and then again a fall (for the post-2015 dynamics, see Figure 1). Over the whole period since 2011 (see also Figure 2), the trend is noticeably downwards although the number of current instances is above the trend line.

Figure 1 – Number of reported and recognised cases of occupational disease in the Republic of Croatia, 2015-2019

Source: <https://www.hzzo.hr/zastita-zdravlja-na-radu/statisticki-podaci-o-prijavama-o-ozljedi-na-radu-i-profesionalnim-bolestima/>

In Croatia, more than ~~sixty~~ seventy per cent (74%) of all applications received for the recognition of occupational diseases are successful. The percentage rate of accepted applications varies from one European country to another but, in most, does not exceed fifty per cent other than in France, where it reaches 75 per cent (Walters 2007; Bogadi-Šare 2014). The most common cause of the non-recognition of occupational diseases in Croatia is the lack of evidence of occupational exposure. A major problem here is poor co-operation with employers who do not want to provide all the relevant information about the workplaces of potentially affected workers.

The reasons for these dynamics should primarily be sought in the structure of registered diagnoses that have an established occupational background. Namely, this number includes all occupational diseases recognised within the health insurance system, which means that it also encompasses all occupational diseases that have occurred as a result of exposure to asbestos fibre (see Figure 2). According to a special regulation, this group of diseases is monitored in a separate register but, due to their occupational source, these diseases are also included in the main Register. This significantly affects the total number of occupational diseases in each calendar year.

Figure 2 – Proportions of occupational diseases caused by asbestos and other occupational diseases, 2015-2019

Source:<http://www.hzzzsr.hr/index.php/porefesionalne-bolesti-i-ozlede-na-radu/profesionalne-bolesti/profesionalne-bolesti-u-republici-hrvatskoj/>.

### Guidelines for the procedure for reporting occupational diseases caused by COVID-19 infection

Health care workers are exposed to specific dangers, harm and effort in carrying out their jobs, including contact with sick people. Such workers belong among the group of occupations with an increased risk of certain occupational diseases. At the beginning of March 2020, trade unions operating in the health sector in Croatia launched an initiative to amend the *Regulation on the rights, conditions and manner of exercising compulsory health insurance rights in the event of an injury at work or an occupational disease*, with the aim of achieving recognition for occupational diseases caused by COVID-19.

Respecting the trade union and professional initiative, the Governing Board of the Croatian Health Insurance Fund, with the consent of the Health Minister, adopted a Regulation amending this law at its 55th extraordinary session, held on 16 March. The amendment came into force on 1 April, after being published in *Official Gazette* 39/20, thus bringing into effect the procedure for reporting an occupational disease caused by COVID-19 infection. As already mentioned, occupational diseases are defined in the List of Occupational Diseases*,* while jobs in which occupational diseases occur are considered to be those in which workers are exposed to chemical, physical and biological hazards and stresses referred to on the List. Item 45, concerning ‘Infectious or parasitic diseases caused by work in activities where an increased risk of infection has been proven’ is applicable to the reporting and recognition of occupational diseases caused by COVID-19 infection.

The highest number of reports of occupational diseases caused by COVID-19 can be expected from health workers, but they are also possible in other professions that are necessary for the functioning of the state during a pandemic (e.g. police officers, border guards, customs officers, firefighters, couriers and traders). All these types of worker are continuing to go to work at this time in accordance with the law restricting social gatherings, work in trade and services, and sporting and cultural events adopted by the country’s Civil Protection Headquarters on 19 March.

To implement the changes as quickly as possible, the Croatian Association for Occupational Medicine (part of the Croatian Medical Association) has developed *Guidelines for the procedure for reporting occupational diseases caused by COVID-19 infection*. A worker who is diagnosed with an infectious disease caused by COVID-19 and who works in a workplace where there is an increased risk of COVID-19 infection should contact a competent medical specialist by phone or (if recovered or COVID-19 negative) in person. Occupational medicine professionals will provide the necessary documentation based on which diagnosis will be carried out in accordance with the provisions of the *Law on the List of Occupational Diseases.*

The diagnosis begins with an inspection of the medical records proving that the worker is suffering from a contagious disease caused by COVID-19, including laboratory documentation of test results as well as clinical documentation regarding the findings of an infection specialist and other medical findings as appropriate. The procedure continues via proving a link between the disease and workplace exposure, including:

* a detailed work history, directly or indirectly through the official job description (Form 2 IN); or an excerpt from the risk assessment document for the job in question, with a list attached by the employer detailing the employee’s duties and any business trips abroad 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. Data on the use of personal protective equipment at work in the period one month before symptoms appeared is also recorded
* a detailed personal history and confirmation from the family doctor of other diseases to which the worker has been exposed; or insight of the personal health records of the worker if it is not possible to conduct a personal examination
* an epidemiological history of illness related to COVID-19 and other contacts outside the workplace, data on non-working days and private trips in the period one month before the onset of symptoms (in the form of a written statement from the worker if a personal examination is not possible).

After inspecting the documentation, the specialist will complete the procedure for diagnosing an occupational disease by giving an opinion on whether an occupational disease exists in line with the law regulating the recognition of occupational diseases.

### Conclusion

The *Law on the List of Occupational Diseases* sets down that infectious occupational diseases are those caused by exposure at work in activities where there is an increased risk of infection. The new Amendment to the  *Regulation on the rights, conditions and manner of exercising compulsory health insurance rights in the event of an injury at work or an occupational disease* provides for the possibility of exercising rights drawn from the law on recognising occupational diseases, where a worker has an infectious disease, from the date they contracted it. This does not mean that all employees insured through HZZO and who have contracted a disease caused by COVID-19 infection will be entitled to recognition that their disease is occupational, i.e. to the payment of full salary compensation during their temporary incapacity for work.

The procedure for seeking recognition that a disease is occupational, and determining this, is initiated by submitting an application form to the appropriate regional office of the Croatian Health Insurance Institute.

A report of an occupational disease is submitted by the employer ex officio or following the request of the worker, which is sent via the regional office of the Croatian Health Insurance Institute. The mentioned report has to be sent within a period of eight days from the day the worker received a document diagnosing his occupational disease.

If the employer does not make such a report, an application may be submitted instead by a doctor of general/family medicine at the request of the employee or following a proposal by the appropriate occupational medicine professional. In turn, an application for the recognition of an occupational disease and a determination of the right to compulsory health insurance benefits due to an occupational disease may be submitted by the worker himself, or a family member in the event of the worker's death, within three years.

Official data from the Register of Recognised Occupational Diseases indicate that the incidence of occupational disease in Croatia is many times lower than in the European Union. This indicates possible shortcomings in the health, and health insurance, system regarding the identification, diagnosis, reporting and monitoring of occupational diseases in Croatia. It also highlights that there are potential shortcomings in the implementation of occupational rehabilitation schemes for patients with occupational diseases.

If we add to this the resistance of some employers to the recognition of occupational diseases which for them, as holders of legal responsibility, means an organisational and often legal and financial problem, and the repeated fears of workers losing their jobs, the poor level of recognition of occupational diseases in Croatia should not be surprising.

Research conducted in the past in Croatia (Bubaš *et al*. 2008; Ečimović Nemarnik and Macan 2016) indicate the presence of inadequate care for workers with occupational diseases. There is a noticeable trend towards dismissal and the early retirement of workers with a diagnosed occupational disease without the employer conducting the procedure of looking after sick workers by changing or adapting their jobs.

Despite all the advantages and disadvantages in diagnosing and recognising occupational disease in Croatia, the current health crisis caused by the COVID-19 pandemic has shown us that social dialogue is the only solution to improving health and safety at work. Effective social dialogue, between representatives of the government and trade unions operating in the health sector, with the full support of and co-operation with professional associations, found a solution and, by changing a bylaw, removed an administrative barrier to the recognition of occupational diseases caused by COVID-19 in Croatia.

There remains, however, an awful long way to go on all these fronts and further action will be required if workers are to be fully protected at work. But, it is symbolic that a start has been made in these times of international crisis.

### References

Bogadi-Šare, A (2014) ‘Why the number of occupational diseases in the Republic of Croatia is low’ 5. *Međunarodni stručno-znanstveni skup Zaštita na radu i zaštita zdravlja* Zbornik radova: Zadar, pp. 132-138 (in Croatian).

Bubaš, M, M. Milošević and D. Delić-Brjkljačić (2008) ‘Occupational diseases, working ability and employment status in the working population of Croatia’ *Collegium Antropologicum* 32(3): 677-680.

Ecimović Nemarnik, R and J. Macan (2016) ‘Employment status of patients with diagnosed occupational disease: preliminary data’ Sigurnost 58(3): 213-218 (in Croatian).

Walters, D (2007) Research Report. *An International Comparison of Occupational Disease and Injury Compensation Schemes* Research report prepared for the Industrial Injuries Advisory Council (IIAC), March, available at: <https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/330347/InternationalComparisonsReport.pdf>.

Legislative framework:

*Compulsory Health Insurance Act* (OG 80/13, 137/13 and 98/19).

*Law on the List of Occupational Diseases* (OG 162/98, 107/07).

Regulation on the rights, conditions and manner of exercising compulsory health insurance rights in the event of an injury at work or an occupational disease (OG 75/14, 154/14, 79/15, 139/15, 105/16, 40/17, 66/17, 109/17, 132/17, 119/18, 41/19, 22/20 and 39/20).

National Classification of Activities 2007 (OG 58/07) comparable to the second revision of the International Classification of Activities, NACE 2007 (*Nomenclature statistique des activités économiques dans la Communauté européenne*) Rev.2.

National Classification of Occupations (OG 14/11) comparable to the International Statistical Classification of Occupations (ISCO).

Classification of the causal agents of occupational diseases, EODS.

European Occupational Disease Statistics – EODS, European Commission, 2000.

International Classification of Diseases and Related Health Problems – Tenth Revision, ICD-10.

Commission Recommendation 2003/670 / EC of 19 September 2003 concerning the European schedule of occupational diseases.

Internet:

<http://www.hkms.hr/wp-content/uploads/2020/03/Dopis-Hrvatskog-zavoda-za-zdravstveno-osiguranje.pdf>

<http://www.hzzzsr.hr/index.php/porefesionalne-bolesti-i-ozlede-na-radu/profesionalne-bolesti/profesionalne-bolesti-u-republici-hrvatskoj/>.

<https://www.hzzo.hr/zastita-zdravlja-na-radu/profesionalna-bolest/>

<http://www.hdmr.hlz.hr/2020/obavijest-13-covid-19.php>

<https://www.hzzo.hr/zastita-zdravlja-na-radu/statisticki-podaci-o-prijavama-o-ozljedi-na-radu-i-profesionalnim-bolestima/>

All internet sites last accessed on 29 May 2020.

**About the Authors**

|  |  |
| --- | --- |
|  | **Cvetan Kovač** has two bachelor degrees in traffic engineering and safety engineering.He is the co-ordinator of the Occupational Health & Safety Committee of theIndependent Trade Unions of Croatia, engaged in promoting the role and importanceof workers’ representatives, OHS representatives, works councils and trade unionswithin various business systems in Croatia. He is the author and co-author of a significantnumber of scientific and professional papers, while the Ministry of Labourand Pension System awarded him its Occupational Health and Safety Prize in 2015. |
|  | **Ivana Krišto** PhD is Lecturer in the Faculty of Metallurgy, University of Zagreb.She is an active participant in scientific and professional events, as well as authorand co-author of many scientific and professional papers in occupational health andsafety. Her educational qualifications are in engineering, and she is also Vice-Presidentof the European Society of Safety Engineers. The Ministry of Labour and PensionSystem awarded her its Occupational Health and Safety Prize in 2017. |
|  | **Ana Šijaković** Ec. S. teaches postgraduate occupational health and sports medicinein the Medical School of the University of Zagreb and ŠNZ Andrija Štampar, Zagreb.She is an economic specialist and has a bachelor degree in safety engineering,and is General Secretary of the European Society of Safety Engineers. She is the authorand co-author of many scientific and professional papers and a regular participantin academic and professional events in occupational health and safety. The Min istry of Labour and Pension System awarded her its Occupational Health and SafetyPrize in 2019. |

1. This article published in SEER Journal for Labour and Social Affairs in Eastern Europe, European Trade Union Institute, Volume 23 (2020), Issue 1. [↑](#footnote-ref-1)