

Key Points in the History of Occupational Medicine in Central Europe

*On Occupational Diseases, Patients, and
Politics*

by

Daniela Pelclova

Key Points in the History of Occupational Medicine in Central Europe: On Occupational Diseases, Patients, and Politics

by Daniela Pelclova

2026

Ethics International Press, UK

British Library Cataloguing in Publication Data

A catalogue record for this book is available from the British Library

Copyright © 2026 by Daniela Pelclova

All rights for this book reserved. No part of this book may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without the prior permission of the copyright owner.

ISBN (Hardback): 978-1-83711-985-1

ISBN (Ebook): 978-1-83711-986-8

Table of Contents

List of Tables, Graphs and Figures	vii
Chapter 1: Introduction	1
Chapter 2: List of Occupational Diseases	4
Chapter 3: Statistics of Occupational Diseases	31
Chapter 4: The Origins and Development of Czech Occupational Medicine	44
Chapter 5: Period 1: 1932–1950: The First Outpatient Department.....	46
Chapter 6: Period 2: 1951–1989: A 27-Bed Clinic During the Communist Era	61
Chapter 7: Period 3: 1989–1999: The Clinic After the “Velvet Revolution”	108
Chapter 8: Period 4: 1999–2011: A 15-Bed Clinic.....	124
Chapter 9:Period 5: 2011–Present: An Outpatient Department Again.....	205
Chapter 10: A Look Back at My Career in Occupational Medicine	266

List of Tables, Graphs and Figures

List of Tables

Table 1: Czech List of Occupational Diseases

List of Graphs

Graph 1: Number of occupational diseases in the Czech Republic recognized annually since 1954.

Graph 2,3,4: Structure of occupational diseases in 1956, 1980, and 2019 according to the Chapters of the List of Occupational Diseases.

Graph 5,6: Total occupational diseases in 2025 according to the chapters of the List of Occupational Diseases, and after excluding COVID-19 infections.

Graph 7, 8, 9, 10: Occupational intoxications in 1956, 1980, 1989 and 2024.

Graph 11: Statistics of pneumoconioses in the Czech Republic since 1996.

Graph 12: Statistics of benign asbestos-induced diseases in the Czech Republic since 1996.

Graph 13: Statistics of malignant asbestos-induced diseases in the Czech Republic since 1996.

Graph 14: Number of calls to the Toxicological Information Centre since its beginning in 1962.

Graph 15,16: Reasons of calls to TIC in the adults and children.

Graph 17: Structure of agents related to calls to TIC.

List of Figures

Figure 1: a) 27 countries of the European Union b) The Czech Republic (Czechia) on the map.

Figure 2: Diseases caused by overload: a) Hands of a worker with 12 years of exposure in the automotive industry and b) Scar after recent carpal tunnel surgery.

Figure 3: Occupational skin diseases: a) Contact allergic dermatitis due to long-term contact with black leather used for car seats and b) Contact irritant dermatitis caused by disinfectants without using of gloves.

Figure 4: a) Equivalent of maximum compensation for an acute occupational disease (a car) b) Equivalent of maximum compensation for a severe chronic occupational disease (a country house).

Figure 5: A memorial to the victims of COVID-19 on Old Town Square, viewed in the early morning hours of March 31, 2021.

Figure 6: a) A lead smelter working in an open space also needs to use a respirator b) pre-final lead product c) metallic lead.

Figure 7: a) The Gothic-style Týn Church in Old Town Square in the early morning b) A man cleaning windows at a height on the *Dancing House*, or “Fred and Ginger” building.

Figure 8: Baroque churches in Prague a) Church of St. Nicolas b) Church of St. James c) Church of St. Ignatius.

Figure 9: a) The Adria Palace architectural landmark built in the Cubist style in 1924 b) the Ministry of Industry building, constructed in the Neoclassical style in 1932.

Figure 10: a) Title page of the book Pazderová-Vejlupková J: Professor Jaroslav Teisinger and History of Czech Occupational Medicine. Prague: Galén; 2005 b) Medals awarded to Professor Teisinger.

Figure 11: a) Viscose rayons produced in Lovosice factory b) *Metabolismus a detoxikace některých důležitých průmyslových jedů* [Metabolism and detoxification of some important industrial poisons].

Figure 12: a) Drawing of Emmaus Monastery after bombing in February 1945 b) Drawing of Emmaus Building of the Department of Occupational Diseases in 1951–1999.

Figure 13: The Clinic was localized on the bottom right of the photo, with a brighter red roof. Photo courtesy of the author© Jiří Pištěk, www.leteckafotografie.com.

Figure 14: a) Emmaus Monastery on a sunny day (clinic located in the building to the right) b) Emmaus Monastery view at night.

Figure 15: a) Corridor of the 1st floor of the Clinic of Occupational Diseases and b) Room for 2 patients.

Figure 16: a) Dr. Jarmila Filipová on her birthday with a cake titled “Queen of Toxicology” b) Title page of the “History of Modern Clinical Toxicology”.

Figure 17: a) b) X-ray showing lung cancer in two uranium miners.

Figure 18: a) X-ray from 1982 showing advanced silicosis in a lawyer who had been imprisoned for political reasons and between 1953 and 1955 had worked in uranium mines b) Rapidly progressing silicosis in a silver and lead ore miner in Příbram in the years 1952–63, who died in 1969 at the age of 43 years.

Figures 19: a) X-ray showing lung oedema in a young worker after an accident involving chlorine inhalation in a water facility and b) Improvement 3 weeks later.

Figures 20: a) Lung oedema in a woman who inhaled nitric acid vapours while disposing of broken glass containers b) X-ray four weeks later.

Figure 21: The communist symbols a) The Five-pointed Star b) Hammer and Sickle.

Figure 22: a) May Day celebration b) Employees of the clinic and their family members at the May Day celebration in 1977, Professor Hykeš in the centre, and non-communists Assistant Professor Přerovská on the left, and Assistant Professor Spáčilová on the right with a paper flower.

Figure 23 a) Historical flowerpot with lead glaze b) Cats may be in danger if touching fresh glazes.

Figure 24: a) View from the corridor to the mosaic of Saint Wenceslas b) Tempera painting by our patient Mr. Běla.

Figure 25: Serial chest radiographs (1963, 1977, 1980, and 1986) showing silicosis in a miner (1929–1986) who worked in silver and lead ore mining in Příbram from 1952 to 1960. Lung cancer was diagnosed in 1986; the patient subsequently died at the age of 57 years. Smoker, 40 cigarettes per day.

Figure 26: Chest X-rays 1992, 2003, and 2012 showing coal workers' pneumoconiosis in a miner born in 1952 who worked in a black coal mine in Kladno from 1970 to 1988.

Figure 27: a) Spinning asbestos fibres into yarn without a respirator b) Cutting eternit pipes (dry process).

Figure 28: a) Eternit roofing still in place on some country houses b) Fire blanket for the car which was on the market to extinguish engine fires c) Fire blanket in detail.

Figure 29: a) Pleural hyalinosis in a man, born in 1913, who worked in an asbestos manufacturing plant in 1932-1974. X-ray 1986 b) Pleural hyalinosis in a woman living (but not working) in an asbestos manufacturing plant X-ray 1994.

Figure 30: a) Severe bilateral pleural hyalinosis in a man, who worked with asbestos for 29 years, X-ray 2010 b) High Resolution CT showing a significant thickness of pleura.

Figure 31: a) Asbestosis in a man (born 1910) who worked with asbestos from 1940 to 1970. Chest X-ray 1975 b) Asbestosis in a woman (born 1937) who worked in an asbestos textile workshop from 1952 to 1991. Chest X-ray 2006.

Figure 32: a) Mesothelioma in a woman (1919–1979) who worked in an asbestos spinning workshop from 1958 to 1976 X-rays in January 1979 b) In February 1979 (after removing the fluid) c) In August 1979.

Figure 33: Double mesothelioma – in man (1916-1983) exposed to asbestos in the years 1936-1976 a) X-ray in June and b) September 1982.

Figure 34: Pleural hyalinosis and subsequent lung cancer in a man (1924–1986), not working with asbestos, but living in the proximity with his parents. He died at the age of 62 (Smoker, 40 cigarettes per day). Chest X-rays from 1970, June 1986, and October 1986.

Figure 35: a) b) Protests during Palach Week at Wenceslas Square.

Figure 36: a) Demonstration of the students on November 17, 1989.

b) *Dismantle the communist party's monopoly. A free republic in a free Europe. We want the truth.* Photos courtesy of the author © Přemysl Hněvkovský.

Figure 37: a) b) c) Future president Václav Havel speaking to the public at a mass demonstration in Prague on November 25, 1989.

Figure 38: a) Manifestation in central Prague b) Václav Havel on a postage stamp as president.

Figure 39: a) “The Red Tower of Death” photo courtesy of KPV b) Beneath the Tower of Death c) Remembrance Day at the mass grave of political prisoners in Prague.

Figure 40: a) Introductory slide of the 1992 movie “Clinic for Occupational Diseases” b) Charles Weinstein in Prague.

Figure 41: a) The main nurse, fixing the infusion set for a patient with pneumoconiosis b) Detail of the infusion.

Figure 42: a) D. Pelclova answering a toxicological call b) Paper cards “database” c) Books as a source of toxicological information.

Figure 43: Our clinic team in white medical uniforms in the courtyard of the Emmaus Monastery (1997).

Figure 44: a) The Art Nouveau building b) The exterior sundial c) Patient rooms with three to four beds.

Figure 45: a) The Office of the Head of the Clinic in 1999 b) The dedicated study area for medical students preparing for examinations inside the Head’s Office.

Figure 46: a) b) Chronic skin sequelae, “chloracne” in two patients.

Figure 47: a) b) c) Paraffin-embedded tissue samples of the lethal case.

Figure 48: a) Printing paints b) The interior of the rotogravure printing plant.

Figure 49: a) Lanthony Test (both eyes optimal CCI = 1.00 (normal 1.70 or lower) in unexposed subject b) Lanthony Test in a 57-year-old printer (left eye CCI = 1.81, right eye = 2.05).

Figure 50: a) b) The analysis of chromosome damage in 100 cells with 46 chromosomes in a printing worker c) Glass microscope slides.

Figure 51: a) Mrázová K: Child poisoning. Can you deal with it?

Prague 2009 b) TIC leaflet “Prevent children from accessing these substances in particular”.

Figure 52: a) 0.10 ml of liquid mercury (= about 1.5 thermometers) b) Mercury thermometers.

Figure 53: a) One ml of mercury b) Radiological finding of deposits in the lungs two months after i.v. injection.

Figure 54: a) X-rays of two Hg deposits in the cubital area localized in the soft tissues, side view b) Front view.

Figure 55: a) X-ray five days after high exposure to Hg vapours b) One week later.

Figure 56: a) Carpet contaminated with liquid Hg b) Gingivitis of the father c) Young parents at our Clinic.

Figure 57: a) Tremor manifested in the patient's signature on admission b) Signatures during days 2–7 of antidote therapy in a severely intoxicated young male with mercury poisoning following intensive, three-week application of an ammoniated mercury chloride cream for chest eczema.

Figure 58: a) Red lead (minium) in the rectum b) Minium c) Control X-ray 5 days later.

Figure 59: Three lead-glazed jugs that caused the poisoning of six people and were ultimately donated to our clinic.

Figure 60: a) 500 lead airgun shots in the stomach b) Shots in the intestines.

Figure 61: a) One hundred airgun lead shots, i.e. 49 grams b) Historical 18-gram leaden seal for a miller's sack.

Figure 62: a) The ceiling with lead paint b) Ceiling after lead paint removal.

Figure 63: a) Mother during her second hair loss episode b) Photo five months later.

Figure 64: a) Hair loss in the daughter b) Hair lost c) Inability to walk independently d) Daughter starts walking.

Figure 65: a) Broken ceramic head b) X-ray of damaged endoprosthesis c) Metallic debris containing cobalt.

Figure 66: a) X-ray of the hip in Case 3 with about 500 mL deposit of metal debris b) After surgery.

Figure 67: a) b) c) *Amanita phalloides* found in forests in Central Europe.

Figure 68: a) Eight lethal mushrooms *A. phalloides* b) *A. phalloides*, ingested by a young woman together with two edible *Lepiota procera* mushrooms.

Figure 69: a) The Northeast part of the Czech Republic as the most affected b) Label with the Likérka Drak Logo. Courtesy of the Czech agriculture and food inspection authority (CAFIA).

Figure 70: a) Label of the methanol adulterated rum b) Label of the methanol adulterated vodka.

Figure 71: a) b) Professor Sergej Zacharov speaking about Czech methanol outbreak at EUROTOX Bratislava, Slovakia in 2017.

Figure 72: a) TiO₂ production plant with a high proportion of nanoparticles b) Fe oxides pigment production with a high proportion of nanosized particles.

Figure 73: a) Black source mineral ilmenite b) Dust samples for analysis.

Figure 74: a) Machining in the study of nanomaterials b) Welding in the research institute.

Figure 75: a) Storage of biological samples b) Researchers' examination during the nanomaterials study.

Figure 76: Team during the nanomaterials study from the Department of Occupational Medicine and the Institute of Chemical Process Fundamentals of the CAS (from the left: Š. Vlčková, V. Ždímal, Z. Fenclová, L. Lischková, J. Schwarz, D. Pelclová, P. Klusáčková, B. Sedláčková, O. Makeš, T. Klusáčková).

Figure 77: a) Personal Nanoparticle Sampler (PENS) used during the Stomatological Study b) Sunscreen containing nano-TiO₂ c) Sunscreen applied to 80% of the body surface for three consecutive days.

Figure 78: a) Church of Saint Wenceslas in Olomouc b) Associated Professor Marie Nakládalová, PhD., head of the Department of Occupational Medicine in Olomouc c) Olomouc Upper Square. Photo courtesy of the author© Dominik Tefert.

Figure 79: a) Chairing a session with Professor J. Buchancová (left) and Associated Professor Eleonora Fabiánová (right) at the Czech and Slovak Congress of Occupational Medicine in Martin, Slovakia 2000 b) Czech and Slovak team of toxicologists at EAPCCT congress 2015 in Malta (Head of Slovak TIC S. Plačková, D. Pelclová, B. Cagáňová, S. Zacharov).

Figure 80: J. Teisinger Medal Awarded to Experts in Occupational Medicine.

Figure 81: a) Jubilee seminar for the 60th anniversary of the department in the large auditorium at the State Institute of Public Health b) Final instructions from co-organizer, neurologist Assoc. Prof. P. Urban, Ph.D.

Figure 82: a) Attentive participants (first row left Associate Professor Jana Vejlupeková, Ph.D.) b) Presenting Professor Miroslav Cikrt, Dr.Sc., chairman of the Society of Occupational Medicine.

Figures 83: Five presenting Ph.D. Students at the Jubilee Seminar for the 70th Anniversary of the Department in 2017: a) K. Mrázová b) A. Laštovková c) A. Machovcová d) P. Klusáčková e) J. Hlušička.

Figure 84: The Board of the Society of Occupational Medicine in 2019 (from the left: A. Hejlek, J. Hlávková, J. Šalandová, M. Cikrt, A. Lajčíková, I. Kučera, M. Tuček, P. Svačina, D. Pelclová, K. Píšová, K. Šváblová, P. Klusáčková, S. Zacharov, M. Nakládalová).

Figure 85: a) Barry Levy b) Chuck Levenstein c) The Meeting of colleagues in Pultusk: Henryk Kirschner from Poland, Barry Levy from USA, Danica Prpić-Majić from Croatia, Daniela Pelclová from the Czech Republic, and Charles Weinstein from the USA.

Figure 86: a) Work at height in Leuven during 8th International Conference on the History of Occupational and Environmental Health in April 2026 b) Logo of ICOH c) Occupational risk in the construction industry.

Figure 87: a) Information about the MEPS Project b) The participants: Prof. Petr Broulík, Assoc. Prof. Miloš Grim, Prof. Emanuel Nečas, Assoc. Prof. Daniela Pelclová, Prof. Ctibor Povýšil, Prof. Jaroslav Živný.

Figure 88: a) Welcome to Wisconsin b) Participants with organizers, Gwen and Bob Wortock (5th and 8th person from the left side).

Figure 89: IPCS INTOX Meeting on November 7-11, 2000, co-organized by the Poisons Information Centre in Erfurt, Germany (Dr. Jenny Pronczuk in the first row in red).

Figure 90: a) Acid-containing tile cleaners b) c) Alkaline drain cleaners.

Figure 91: a) EAPCCT 2006 Programme and Abstracts Book. b) Logo of TIC (in Czech language: Toxikologické informační středisko), designed by Jiří Pelcl, Professor of Architecture.

Figure 92: a) Professor Jan Meulenbelt from the Netherlands receives the award for an honorary Louis Roche Speaker from the EAPCCT President Professor Nick Bateman, UK b) Professor Hans Persson

from Sweden playing piano and Dr. Alex Campbell from UK singing at the gala dinner in Prague.

Figure 93: Toxic plants a) Poison Hemlock *Conium maculatum* plant b) *Convallaria maialis* leaves.

Figure 94: The actors in the Television program titled "Health Test of the Nation".

Figure 95: TIC role in the TV competition in the first aid in intoxications the households.

Figure 96: a) Cover of the book b) Prevention when working at heights c) Overwhelmed with work.

Figure 97: a) Risk of working with vibrations b) Risk of manual labour c) Good cooperation needed.

Figure 98: a) Attention, honey! b) Prevention in a cheese factory c) Work with fire.

Figure 99: a) Bullfighters' Pool Insurance b) Break at work c) Occupational injury.

Figure 100: a) Map of methanol deaths b) Dr Hovda visiting hospitals treating patients with methanol poisoning.

Figure 101: a) ASHT workshop in Prague in 2014 (Alvin Bronstein, Alison Good, Gabija Dragelyte, Nick Edwards, Raquel Duarte-Davidson) b) ASHT Leaflet.

Figure 102: a) Palazzo del Pio in Carpi, where the meetings took place b) c) The palazzo and the Duomo di Carpi were damaged by an earthquake in 2012.

Figure 103: Group photo of the Collegium Ramazzini. President Professor Philip Landrigan is in the first row, eighth from the right; future President Professor Melissa McDiarmid is in the second row, second from the left.

Figure 104: a) A session at the Palazzo dei Pio in 2015 b) Academy logo c) The Ramazzini Medal d) A presentation during the Ramazzini Days about TCDD chemical levels in the body and their health impacts on Czech patients.

Figure 105: a) Logo of MODERNET b) The group of participants at the workshop in Ljubljana, 2025.

Figure 106: a) b) Information leaflets for the International Symposium in Taipei.

Figure 107: a) The name for Taiwan in Portuguese is *Ilha Formosa*, reflecting the beauty of this island b) Lake near Chiang Kai-Shek's former summer residence.

Figure 108: a) Chiang Kai-shek Palace b) Dinner in the Palace.

Figure 109: a) Participants of the International Cooperation Workshop with toxicologists from Taiwan b) Professor Deng speaking.

Figure 110: a) Dinner in the Old Town b) c) Group at the Old Town Square in front of the Astronomical Clock.

Figure 111: a) Art Nouveau Municipal House for a concert b) Group Photo of Taiwanese and Czech TIC toxicologists before a boat ride on the Vltava River.

Figure 112: Night View on the Prague Castle over the Vltava River with Charles Bridge.

Figure 113: a) Jubilee Medal of the 1st Medical Faculty of Charles University b) Teisinger Medal for an Honorary Member of Czech Society of Occupational Medicine c) Collegium Ramazzini Fellow d) Medal of the Czech Medical Society of J. E. Purkyně e) Louis Roche Lecturer EAPCCT award.

Figure 114: a) b) Demanding working conditions.

Figure 115: a) b) c) Women's hard work.

Figure 116: a) Granddaughter Saša tested the children's skin cream b) Skin cream c) Grandson Igi doing the same 5 years later d) Granddaughter Rosi with detergent e) Granddaughter Oli with my cologne.

Chapter 1

Introduction

Occupational Medicine, including the diagnosis and treatment of occupational diseases, is a relatively young medical specialty, although the book *De morbis artificum diatriba (The Diseases of Workers)* by the “father of Occupational Medicine,” the Italian professor Bernardino Ramazzini, was published as early as 1700.

Prevention may sound like a somewhat dry and formal concept. However, it truly changes people's lives, as demonstrated by the history of Occupational Medicine in the Czech Republic, a country located in the heart of Europe. Of course, other Central European countries experienced similar situation, when the progress reached before the World War II has been stopped by the political changes, and they stayed “Behind the Iron Curtain”.

Figure 1: a) 27 countries of the European Union b) The Czech Republic (Czechia) on the map1.



The field is closely linked to the political system and depends on legislation and the level of democracy, as was already evident in 1932, when the first Out-Patient Department of Occupational Medicine was started. At that time, the country was a democratic state.

In 1946, i.e. 80 years ago, the first Occupational Medicine Department gained the status of a Clinic and the management of severely affected patients with work-related diseases began to look more optimistic.

After 1948, however, under the communist totalitarian regime, the situation changed dramatically, and even political prisoners were forced to work in uranium and ore mines.

During the years of the communist regime, when the worker was at the top of communistic society, despite regular measurements demonstrating extreme exposure to toluene and the presence of hallucinations and other typical symptoms of toluene intoxication in printers, their work had to continue. The explanation lay in political interests and in the printing of socialist journals, including those exported to the Soviet Union, until the regime finally collapsed in 1989.

Great progress in workplace hygiene supervision and in the care of employees exposed to occupational hazards in the following decades has been reflected in a decreasing number of serious occupational diseases and in the gradual reduction of hospital beds dedicated to occupational medicine in the country. In practice, this has meant fewer tragic outcomes and more happy families.

Despite the gradual extension of the List of Occupational Diseases – thanks both to improved diagnostic capabilities and to deeper knowledge of occupational risks worldwide – the number of newly reported occupational diseases in the Czech Republic has been

steadily decreasing since its peak in the 1960s. By 2020 (before the COVID-19 pandemic), it had fallen to less than one fifth (18.9%) of the peak level, and by 2025 to almost one sixth (15.1%), excluding reported COVID-19 cases.

More importantly, the severity and spectrum of recognized occupational diseases have been changing. The life-threatening pneumoconioses and poisonings are becoming rare. However, surprises occur both in occupational medicine and toxicology.

This positive development is described here from my perspective as a physician who has spent nearly 50 years working at the same institution—accounting for almost half of its existence. It is the oldest Department of Occupational Medicine in the country, and it also houses the Toxicological Information Centre for the Czech Republic.

Answering public inquiries about intoxications is an incredibly engaging field full of surprises. For instance, we see how mercury from a thermometer, lead shot, or old stockpiles of thallium can be mishandled, turning the search for the cause into something resembling a detective story. In other instances, the illusion of making easy money can lead to tragedy, such as when hundreds of people were poisoned by illicit methanol. Nevertheless, we are always glad to receive these calls and offer a quick piece of advice. For most callers, the toxicologist's answer brings reassuring news: the situation can be safely managed at home.

¹ Czechia – EU country | European Union

Chapter 2

List of Occupational Diseases

Table 1: Czech List of Occupational Diseases, Government Order No. 428, of September 24, 2025

The Czech list sets out the basic criteria for recognizing a condition as an occupational disease.

In the left-hand column, those specifying the clinical findings and their minimum required level, using objective methods, where applicable.

The right-hand column describes the exposure criteria for the development of occupational diseases according to current medical knowledge. For many occupational diseases, specific methodological or standard procedures defining both clinical and exposure criteria have also been published.

CHAPTER I <i>Occupational Diseases caused by chemicals</i>		
Item	Occupational Disease	Conditions for the recognition
1	Disease caused by lead or its compounds	Regarding items 1 to 58: Illnesses raise during the performance of work in which exposure to chemical substances, their compounds, or mixtures of substances is proven to be the cause of the disease, according
2	Disease caused by mercury or its compounds	
3	Disease caused by arsenic or its compounds	
4	Disease caused by bismuth or its compounds	
5	Disease caused by beryllium or its compounds	
6	Disease caused by cadmium or its compounds	

CHAPTER I <i>Occupational Diseases caused by chemicals</i>		
Item	Occupational Disease	Conditions for the recognition
7	Disease caused by chromium or its compounds	to current medical knowledge.
8	Disease caused by manganese or its compounds	
9	Disease caused by nickel or its compounds	
10	Disease caused by phosphorus or its compounds	
11	Disease caused by vanadium or its compounds	
12	Disease caused by fluorine or its compounds	
13	Disease caused by chlorine or its compounds	
14	Disease caused by other halogens or their compounds	
15	Disease caused by zinc or its compounds	
16	Disease caused by copper or its compounds	
17	Disease caused by carbon monoxide	
18	Disease caused by nitrogen oxides	
19	Disease caused by sulphur oxides	
20	Disease caused by hydrogen cyanide or cyanides	
21	Disease caused by isocyanates	
22	Disease caused by phosgene	
23	Disease caused by borates	
24	Disease caused by carbon disulphide	
25	Disease caused by hydrogen sulphide or sulphides	
26	Disease caused by ammonia	

CHAPTER I***Occupational Diseases caused by chemicals***

Item	Occupational Disease	Conditions for the recognition
27	Disease caused by halogenated hydrocarbons	
28	Disease caused by aliphatic or alicyclic hydrocarbons	
29	Disease caused by alcohols	
30	Disease caused by glycols	
31	Disease caused by ethers and ketones	
32	Disease caused by formaldehyde and other aliphatic aldehydes	
33	Disease caused by acrylonitrile and other nitriles	
34	Disease caused by aliphatic nitro derivatives	
35	Disease caused by benzene	
36	Disease caused by benzene homologues	
37	Disease caused by naphthalene or its homologues	
38	Disease caused by vinylbenzene or divinylbenzene	
39	Disease caused by phenols, their homologues or their halogenated homologues	
40	Disease caused by aromatic nitro or amino compounds	
41	Disease caused by polychlorinated biphenyls, dibenzodioxins and dibenzofurans	
42	Disease caused by polycyclic condensed hydrocarbons	
43	Disease caused by synthetic pyrethroids	
44	Disease caused by dipyridyls	
45	Disease caused by carbamates	

CHAPTER I***Occupational Diseases caused by chemicals***

Item	Occupational Disease	Conditions for the recognition
46	Disease caused by compounds of platinum metals group	
47	Disease caused by thallium or its compounds	
48	Disease caused by barium or its compounds	
49	Disease caused by tin compounds	
50	Disease caused by selenium or tellurium compounds	
51	Disease caused by uranium or its compounds	
52	Disease caused by nitric acid esters	
33	Disease caused by inorganic acids	
54	Disease caused by ethylene oxide or other oxiranes	
55	Disease caused by halogenated alkyl ethers or aryl ethers (bischloromethyl ether)	
56	Disease caused by organic acids	
57	Disease caused by alkalis	
58	Disease caused by other substances or their mixtures	

CHAPTER II***Occupational Diseases caused by physical factors***

Item	Occupational Disease	Conditions for the recognition
1	Disease caused by ionizing radiation	The disease occurs during work that has been proven to involve exposure to ionizing radiation that, according to current

CHAPTER II <i>Occupational Diseases caused by physical factors</i>		
Item	Occupational Disease	Conditions for the recognition
		medical knowledge the cause of the disease
2	Disease caused by electromagnetic radiation	The disease occurs during work that has been proven to involve exposure to electromagnetic radiation that, according to current medical knowledge the cause of the disease
3	Cataract caused by thermal radiation	The disease occurs during work that has been proven to involve exposure to thermal radiation that, according to current medical knowledge, is the cause of the disease.
4	Noise-induced cochlear hearing loss. In persons under 30 years of age with a total hearing loss of 40% according to Fowler. In persons over 30 years of age, the limit increases by 1% for every 2 years of age. In persons over 50 years of age, total hearing loss of 50% according to Fowler.	The disease occurs during work that has been proven to involve excessive noise exposure. Excessive exposure is generally considered to be exposure where the equivalent noise level for the normal duration of the shift exceeds 85 dB (A) or the peak level of frequency-unweighted sound pressure exceeds 200 Pa [140 dB (A)].
5	Illness caused by excessive or negative pressure in the surrounding environment	The disease occurs during work in a high-pressure environment or in low-pressure chambers.

CHAPTER II <i>Occupational Diseases caused by physical factors</i>		
Item	Occupational Disease	Conditions for the recognition
6	Secondary Raynaud's syndrome of the fingers caused by working with vibrating tools and equipment. Objectively proven Raynaud's syndrome of at least two fingers in the cold, verified by plethysmographic examination.	Regarding items 6 to 8: Diseases occur when working with manually operated pneumatic tools or when working with vibrating tools with vibration acceleration values that, according to current medical knowledge, are the cause of the disease.
7	Diseases of the peripheral nerves of the upper extremities of the nature of ischemic or strait neuropathies when working with vibrating tools and devices. Ischemic damage to the median nerve, ulnar nerve or both nerves, with clinical symptoms and with pathological EMG findings, corresponding to at least a moderate disorder. Damage to the nerves of the upper extremities of the nature of strait syndrome with clinical symptoms and with pathological EMG findings, corresponding to at least a moderate disorder.	
8	Diseases of the bones and joints of the hands or wrists or elbows when working with vibrating tools and equipment. Aseptic necrosis of the carpal or metacarpal bones or isolated arthrosis of the hand, wrist or elbow joints, associated with severe functional impairment leading to a significant limitation of working capacity.	
9	Diseases of tendons, tendon sheaths, bursae or muscle attachments or joints of the limbs from long-term excessive unilateral overload. Prolonged forms of the disease confirmed by objective examination methods leading to a significant limitation of working capacity.	Regarding items 9 and 10: Diseases arise during work in which the relevant structures are overloaded to such an extent that, according to current medical knowledge,

CHAPTER II <i>Occupational Diseases caused by physical factors</i>		
Item	Occupational Disease	Conditions for the recognition
10	Diseases of the peripheral nerves of the extremities of the nature of the narrowing syndrome from long-term excessive unilateral overload with clinical symptoms and with pathological findings in the EMG examination, corresponding to at least a moderate disorder	overload is the cause of the disease.
11	Chronic diseases of the lumbar spine caused by long-term overloading with heavy physical work, associated with incapacity for work for this diagnosis with a total duration of at least 12 months, the severity of which was evaluated 1. in a clinical neurological examination when evaluating 7 parameters, which are palpation pain in the lumbar segment, Thomayer's sign, Lasègue's sign, alteration of L2/4 or L5/S2 reflexes, motor deficit in the relevant myotome, sensory deficit in the relevant dermatome and EMG evidence of axonal lesion in the relevant nerve root, and based on this examination, an abnormality was detected in a person under the age of 50 years in at least 4 parameters, in the age of 50 to 60 years in at least 5 parameters and over 60 years of age in at least 6 parameters and simultaneously 2. in a radiological examination when evaluating morphological changes in the L3/4, L4/5 and L5/S1 segments when evaluating 5 parameters, which are intervertebral disc degeneration, intervertebral disc protrusion, Modic grade II or III changes of the vertebral bodies, vertebral body displacement and intervertebral joint osteoarthritis, and based on this examination, an abnormality was detected in a person under the age of 50 in at least 5 parameters, in the age of 50 to 60	Diseases arise from heavy physical work, during which the relevant structures are overloaded for a long time to such an extent that, according to current medical knowledge, overload is the cause of the disease.

CHAPTER II <i>Occupational Diseases caused by physical factors</i>		
Item	Occupational Disease	Conditions for the recognition
	in at least 6 parameters and in the age of over 60 in at least 7 parameters out of a total of 15 evaluated parameters.	

CHAPTER III <i>Occupational Diseases involving the respiratory tract, lungs, pleura, peritoneum and GIT</i>		
Item	Occupational Disease	Conditions for the recognition
1	Silicosis or coal miners' pneumoconiosis a) with typical X-ray signs p3/3, q2/2, r2/2 and above, and all forms of complicated pneumoconiosis (A, B, C) according to the ILO classification b) with active tuberculosis c) X-ray p1/1, q1/1, r1/1 and higher according to ILO d) from the level of signs p2/2, q1/1, r1/1 when meeting the criteria for the dynamics of the disease e) acute and subacute forms of silicosis	The diseases arise during work that has been proven to involve exposure to dust containing free crystalline silica, which, according to current medical knowledge is the cause of the disease as to c) the diseases occur in people under the age of 40, working in workplaces where the permissible exposure limits are demonstrably exceeded, while exposure to fibrogenic dust has not exceeded 15 years (3,000 shifts)
2	Diseases caused by asbestos dust a) asbestosis with X-ray signs s2/2, t2/2, and u2/2 and above according to ILO b) pleural hyalinosis with a restrictive lung function impairment c) mesothelioma	The disease occurs during work at work where there is evidence of asbestos exposure that, according to current medical knowledge, is the cause of the disease

CHAPTER III <i>Occupational Diseases involving the respiratory tract, lungs, pleura, peritoneum and GIT</i>		
Item	Occupational Disease	Conditions for the recognition
	d) cancer of the lung, larynx, ovary, stomach, colon or rectum in connection with asbestosis with signs s1/1, t1/1, u1/1 or higher according to the ILO or with pleural hyalinosi ¹	
3	Pneumoconiosis caused by dust in the production and processing of hard metals	The disease occurs during work in which there is evidence of exposure to hard metal dust that, according to current medical knowledge, is the cause of the disease.
4	Welders' pneumoconiosis, X-ray signs of dust changes from the frequency of signs p 3/3, q 2/2, r 2/2 and above according to the International Labor Organization classification	The disease occurs during work in which there is evidence of exposure to fumes produced during electric arc welding that, according to current medical knowledge, is the cause of the disease.
5	Respiratory and lung diseases caused by inhalation of cobalt, tin, barium, graphite, aluminium, beryllium, antimony or titanium dioxide	The diseases arise during work in which there is evidence of exposure to the listed chemical substances, which, according to current medical knowledge, is the cause of the disease.
6	Lung cancer from radioactive substances	The disease arises during work in which there is evidence of inhalation exposure to

CHAPTER III <i>Occupational Diseases involving the respiratory tract, lungs, pleura, peritoneum and GIT</i>		
Item	Occupational Disease	Conditions for the recognition
		radioactive substances, which, according to current medical knowledge, is the cause of the disease.
7	Coke oven gas-induced respiratory tract and lung cancer	The disease occurs during work in which there is evidence of exposure to coke oven gases that, according to current medical knowledge, is the cause of the disease.
8	Cancer of the nasal mucosa or paranasal sinuses	The disease occurs during work in which there is evidence of exposure to wood dust that, according to current medical knowledge, is the cause of the disease.
9	Exogenous allergic alveolitis	The disease occurs during work associated with the inhalation of dust with antigenic and infectious effects.
10	Bronchial asthma and allergic diseases of the upper respiratory tract	The disease occurs during work in which there is proven exposure to dust or gaseous substances with allergenic or irritating effects.
11	Bronchopulmonary diseases caused by cotton, linen, hemp, jute or sisal dust	The disease occurs during work in which

CHAPTER III <i>Occupational Diseases involving the respiratory tract, lungs, pleura, peritoneum and GIT</i>		
Item	Occupational Disease	Conditions for the recognition
		there is proven exposure to the said dust.
12	Lung cancer in association with pneumoconiosis caused by dust containing free crystalline silica with typical X-ray signs of dust changes from the frequency of signs p 3/3, q 2/2, r 2/2 and above according to the International Labour Organization and all forms of complicated pneumoconiosis (A, B, C according to the International Labour Organization)	The disease occurs during work in which there is proven exposure to dust containing free crystalline silica, which, according to current medical knowledge, is the cause of the disease.
13	Chronic obstructive pulmonary disease with FEV1/FVC lower than 0.70 and FEV1 50% of the reference value or less (COPD Stage III)	The disease occurs during mining in coal mines after reaching at least 80% of the maximum permissible exposure and is newly detected within two years after the end of work with the risk of fibrogenic dust containing free SiO ₂

CHAPTER IV <i>Occupational skin diseases</i>		
Item	Occupational Disease	Conditions for the recognition
1	Skin diseases caused by physical, chemical or biological factors	Illnesses arise during work in which the aforementioned factors occur, and according to the current medical knowledge, are the cause of the disease

CHAPTER V <i>Occupationally transmitted and parasitic diseases</i>		
Item	Occupational Disease	Conditions for the recognition
1	Communicable and parasitic diseases with human-to-human transmission or other forms of transmission (except for COVID-19 diseases without complications)	Illnesses occur during work, that has a proven risk of infection
2	Diseases transmitted from animals to humans directly or through vectors	
3	Communicable and parasitic diseases originating abroad (excluding COVID-19)	Diseases emerging in epidemiologically difficult areas with a risk of infection
4	COVID-19 illnesses, with severity at least moderate or the disease progressed with complications	Illnesses occur during work, that has a proven risk of infection

CHAPTER VI <i>Occupational Diseases caused by Other Factors and Agents</i>		
Item	Occupational Disease	Conditions for the recognition
1	Severe hyperkinetic dysphonia, vocal cord nodules, severe vocal cords laxity or severe phonasthenia, if permanent and make impossible the performance of a profession that places increased demands on the voice	Illnesses arise at work associated with high professional vocal strain

Figure 2: Diseases caused by overload: a) Hands of a worker with 12 years of exposure in the automotive industry and b) Scar after recent carpal tunnel surgery.



Figure 3: Occupational skin diseases: a) Contact allergic dermatitis due to long-term contact with black leather used for car seats and b) Contact irritant dermatitis caused by disinfectants without using of gloves.



History and Changes of Czech List

The List of Occupational Diseases represents the basis for decisions on exclusion from occupational risk, but also on compensation.

The *first List of Occupational Diseases* was signed by Czechoslovak President T. G. Masaryk as Law No. 99/1932 Coll. It contained 25 items, including 11 groups of chemicals—among them Pb, P, Hg, As,