

SIGNING CEREMONY

EUROPEAN FRAMEWORK AGREEMENT ON THE PROTECTION OF OCCUPATIONAL HEALTH AND SAFETY IN THE HAIRDRESSING SECTOR

Brussels, Thursday, 26 April 2012

Occupational Health and Safety in the Hairdressing Sector

An ILO Perspective

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Hairdressers, beauticians and related workers

Hairdressers, beauticians and related workers cut and dress hair, shave and trim beards, give beauty treatment, apply cosmetics and make-up and give other kinds of treatment to individuals in order to improve their appearance.



- (a) discussing customers' requirements;
- (b) cutting and dressing hair;
- (c) shaving and trimming beards;
- (d) giving beauty treatment; and applying cosmetics and make up;
- (d) shaping and polishing finger- and toe-nails and treating minor ailments of the human foot;
- (e) attending clients taking baths and administering elementary massage.

Occupations in this minor group are classified into the following unit groups:

5141 Hairdressers

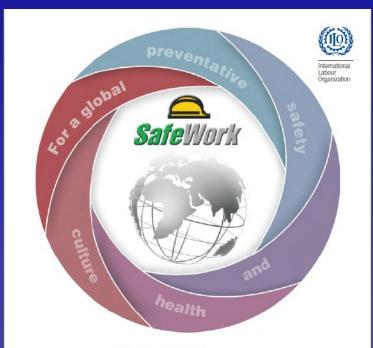
5142 Beauticians and related workers

Notes





- About 2.3 million people die every year from occupational accidents and diseases,
- some 270 million suffer serious non-fatal injuries
- 160 million fall ill from workrelated causes.
- No global OSH statistics for hairdressing sector



XIX World Congress on Safety and Health at Work:

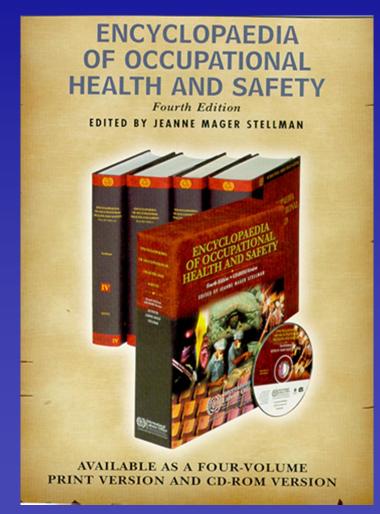
Istanbul Turkey, 11-15 September 2011

ILO Introductory Report: Global Trends and Challenges on Occupational Safety and Health



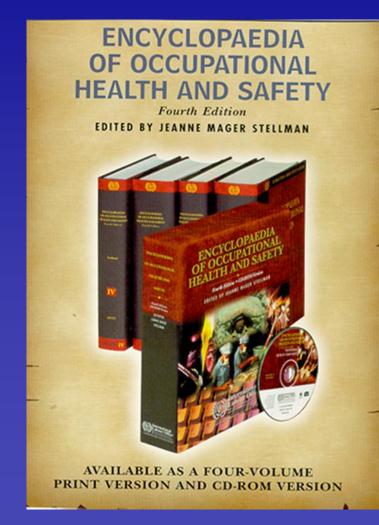


 In the United States, over one million people work in approximately 150,000 salons and barber shops





- A study in 1993 by Nellie Brown at Cornell University, found that 20% of US hair stylists leave their jobs because of work-related illness (New York Times Magazine, 7 March 1993).
- Irritant and allergic dermatitis of the hands alone, or of hands and face together, is a common problem, experienced by 10 to 20% of cosmetologists (van der Walle and Brunsveld 1994).





- The number of employees in the sector is estimated to be around 940,000
- About 40% of hairdressers work parttime and the employee turnover is relatively high
- The hairdressing sector is a typical SME sector and most salons are independent enterprises. A substantial number of hairdressers carry out their business at home or in a dwelling



Risk assessment for Hairdressers

Summary

Following a brief introduction to the hairdressing sector and occupational health and safety in the sector, this article includes sections on How to do a Risk Assessment' and 'How to use a Checklist'. A checklist is then presented to help identify the hazards in the sector. An extensive list of 'proposed solutions and examples of preventive measures' is then considered for different questions posed in the general checklist. A case study is then presented, to show the importance of identifying hazards and taking the appropriate preventive measures. Finally, sources of further information are presented at the end of the article.

Introduction to the hairdressing sector

There are approximately 355,000 hairdressing companies and 400,000 hair salons in Europe.[1] The hairdressing sector is a typical SME sector, and most salons are independent enterprises. A small part of the sector (about 10-15%) consists of large salon chains. In some countries – in particular the Netherlands, Switzerland and Denmark – a substantial number of hairdressers carry out their business at home or in a dwelling. The number of employees in the sector is estimated to be around 940,000. More than 50% of them work in Germany or Italy, and another 29% are based in France and the United Kingdom. About 40% of hairdressers work part-time. The employee turnover is relatively high.[1]

Hairdressers are exposed to serious occupational health risks, which can cause absenteeism from work, early drop-out and social security applications at a relatively young age. Consequently, improving the working conditions of hairdressers is a major priority.

Introduction to the health and safety risks of hairdressers

Physical load and ergonomics

The number of hairdressers reporting with serious or regular musculoskeletal complaints is estimated to be almost 40% for work-related arm, neck and shoulder complaints and 30% for back complaints.[2] This high prevalence of musculoskeletal complaints is caused by (a combination of) working postures and repetitive and sometimes forceful movements of the hands and fingers.[3] In many of their daily work tasks hairdressers work for prolonged periods with elevated arms, bent back and bent head. These working postures induce a static load of the neck and shoulder muscles, causing muscle fatigue. Moreover, in washing, haircutting and styling tasks, extreme



- The number of hairdressers reporting with serious or regular musculoskeletal complaints is estimated to be almost 40% for work-related arm, neck and shoulder complaints and 30% for back complaints.
- Common occupational health problems caused by chemicals of hairdressers are skin and respiratory disorders from allergenic or irritating materials.
- It is estimated that 30% of sick leave taken by hairdressers is related to psychological complaints.



Risk assessment for Hairdressers

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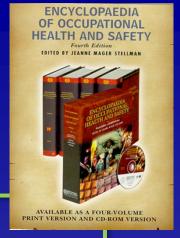
Introduction to the health and safety risks of hairdressers

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European Agency for Safety and Health at Work - http://osha.europa.eu

Major OSH Hazards



Chemical hazards

Hairdressers are exposed to a wide variety of chemicals during the course of a working day. They are at risk for absorbing chemicals through the skin or eyes, inhaling dangerous vapours or particulates and ingesting toxins that have contaminated food, drink or cigarettes

According to a NIOSH report, 30% of the nearly 3,000 chemicals used in cosmetology are classified by the US government as toxic substances. Ventilation in many shops is often inadequate to eliminate chemical exposure.

Testing of products often focuses on risks to consumers, not workers, although workers may be at greater risk due to their daily and prolonged use of cosmetic chemicals



Colouring hair including eyebrow or eyelash tints:

- ✓ Chemicals used include synthetic organic colorants, complex metallic colorants and vegetable dyes. Synthetic hair colorants often include permanent oxidative dyes which use hydrogen peroxide to oxidize aromatic diamines.
- ✓ These chemicals are eye, nose and throat irritants. Synthetic organic hair dyes containing an amine group are also among the most frequent causes of allergic sensitization. Metallic dyes may include lead-containing compounds.
- ✓ Coal tar-based hair dyes may contain mutagens.



Bleaching hair: Bleaching solutions may contain hydrogen peroxide, sodium peroxide, ammonium hydroxide, ammonium persulphate or potassium persulphate. These chemicals can cause skin, eye, nose, throat or lung irritation. Persulphate bleach powders have also been associated with asthma among cosmetologists

Permanent waving: Usually involve applying a thioglycolate or similar solution and rinsing and neutralizing with an oxidizing agent. The solutions used may contain alcohol, bromates, sodium hydroxide, boric acid (perborate or borate), ammonium thioglycolate or glycerol monothioglycolate. Some of these chemicals may cause central nervous system effects (headache, dizziness, nausea, drowsiness); eye, nose and throat irritation; lung problems (breathing difficulty or coughing); skin irritation; burns; or allergic reactions (stuffy or runny nose, sneezing, asthma or allergic dermatitis).



Washing and styling hair:

- ✓ Washing involves shampooing, conditioners and other hair treatment products. These products may contain alcohol, petroleum distillates and formaldehyde which can cause dermatitis and allergies, including asthma. Formaldehyde is carcinogenic.
- ✓ Styling involves the use of gels, creams or aerosol sprays. Aerosol hair sprays may contain polyvinylpyrrolidone, which is associated with lung and other respiratory diseases, including thesaurosis. They also contain a variety of solvents.



- **Straightening hair:** Hair straightener may contain sodium hydroxide, hydrogen peroxide, bromates, ammonium, thioglycolate and glycerol monothioglycolate. These chemicals may cause eye, nose and throat irritation, central nervous system effects and dermatitis.
- Other chemical processes: A variety of cosmetics, including face creams and powders, mascara, eye liners, lipsticks and other products, may also be applied by cosmetologists. These can contain a wide variety of solvents, dyes, pigments, preservatives, oils, waxes and other chemicals that can cause skin allergies and/or irritation.
- Cosmetologists may also remove body hair. Hair removal treatments can involve
 the application of hot wax and use of chemical depilatory products. These
 products often contain alkaline ingredients that can cause dermatitis.

Chemical hazards



Manicures, pedicures and artificial nails:

- ✓ Many chemicals are used in nail products such as acetone, ethyl methacrylate and other acrylates, methyl ethyl ketone, ethyl acetate, lanolin and dimethyl-p-toluidine. These can cause skin, eye, nose, throat and lung irritation, as well as central nervous system effects.
- ✓ Some nail products also contain formaldehyde, associated with allergies as well as cancer with long term use. Some products contain glycol ethers, xylene and toluene, all linked to reproductive problems in laboratory animals.

Major OSH Hazards



Diseases

Hairdressers have close contact with clients and may be exposed to a variety of infectious diseases, ranging from colds and flu to impetigo, chicken pox and hepatitis.

Diseases



Infectious diseases may be spread in the salon in the following ways:

- ✓ Through the air (e.g., upper respiratory illnesses such as colds and flu)
- ✓ Through contaminated water or food (e.g., hepatitis A, salmonella and giardia)
- √ Through insect or animal bites (e.g., lice)
- ✓ Through direct skin contact with infected persons (e.g., scabies, lice, ringworm, impetigo, herpes simplex, colds and chickenpox)
- ✓ Rarely, through exposure to the blood of an infected person (e.g., hepatitis B and HIV/AIDS)

Major OSH Hazards



Ergonomic hazards

The physical demands of work and poorly designed equipment, tools and work spaces can cause musculoskeletal disorders.

Ergonomic hazards



Work involve repetitive motion, prolonged standing, cramped work spaces and poorly designed tools and equipment could cause:

- ✓ Wrist and hand problems, such as tendinitis and carpal tunnel syndrome. Risk factors include bending and twisting of the wrist while cutting and styling hair, holding hair dryers and using a round brush or curling iron. These disorders are also linked to forceful gripping or pinching caused by cutting with dull and/or poorly fitting shears.
- ✓ Shoulder problems, including tendinitis and bursitis. These are associated with constant reaching for supplies, or holding arms above shoulder height while cutting or styling hair.

Ergonomic hazards



- ✓ Neck and back problems, ranging from common aches and pains to serious conditions such as pinched nerves and ruptured discs. These are associated with frequent bending or twisting during activities such as shampooing, cutting hair below ear level, and performing manicures and pedicures.
- ✓ Foot and leg problems, including swelling, calluses and varicose veins.

 These may occur as a result of long periods of standing on hard floors in shoes with poor arch support.

Psychosocial issues



Time pressure

Lack of control in organising the work and taking breaks

Lack of support by colleagues or superiors

Lack of appreciation or rewards, conflicts,

Lack of career development possibilities

Imbalance between work and private life

Sexual harassment

Workplace bullying and mobbing

Aggression and violence

Work organization and other hazards



Working hours

Hairdressers may work on an irregular and extended work schedule. Many work in "split shifts", splitting their work day to cover 12 to 14 hours of client services.

Other problems

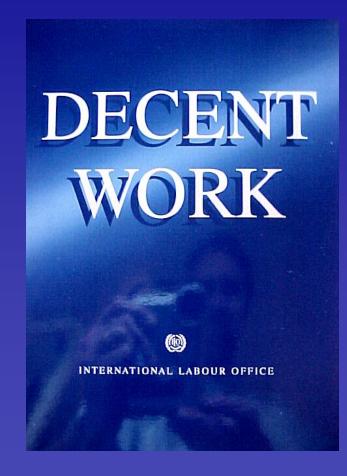
These include poor housekeeping and electrical and fire hazards.

Decent Work must be Safe Work

ILO Response

WIIO!

The International Labour Organization was founded to ensure everyone the right to earn a living in freedom, dignity and security, in short, the right to decent work. We have never accepted the belief that injury and disease "go with the job"



SafeWork

Global OSH Strategy and Action Plan



- Building and maintenance of a preventative safety and health culture
 - right to safe and healthy work environment
 - principle of prevention
 - Tripartite participation

Toolbox

- Development, promotion and supervision of International Labour Standards
- Development of OSH Inspection Systems
- Promotion, awareness raising and advocacy
- Development and promotion of Codes of Practice, guides and other instruments
- Technical assistance and cooperation
- Knowledge development, management and dissemination
- International Collaboration



- Standard-setting is one of the ILO's major means of action to improve conditions of life and work worldwide
- ➤ Between 1919 and 2011, 189 Conventions, 5 Protocols and 201 Recommendations were adopted
- Many of these instruments relate to occupational safety and health

Programme on Safety and Health at Work and the Environment (SAFEWORK)

> SAFEWORK home > ILO instruments on OSH

Conventions and Recommendations

Occupational Safety and Health

- C155 Occupational Safety and Health Convention, 1981
- R164 Occupational Safety and Health Recommendation, 1981
- C187 Promotional Framework for Occupational Safety and Health Convention,
 2006
- R197 Promotional Framework for Occupational Safety and Health Recommendation, 2006

Occupational Health Services

- C161 Occupational Health Services Convention, 1985
- R171 Occupational Health Services Recommendation, 1985.

Major Hazard Control

- C174 Prevention of Major Industrial Accidents Convention, 1993
- R181 Prevention of Major Industrial Accidents Recommendation, 1993

Working Environment

- C148 Working Environment (Air Pollution, Noise and Vibration) Convention, 1977
- R156 Working Environment (Air Pollution, Noise and Vibration)
 Recommendation, 1977

Toxic Substances and Agents

- R3 Anthrax Prevention Recommendation, 1919
- C162 Asbestos Convention, 1986
- R172 Asbestos Recommendation, 1986
- C136 Benzene Convention, 1971
- R144 Benzene Recommendation, 1971
- C170 Chemicals Convention, 1990
- R177 Chemicals Recommendation, 1990
- C115 Radiation Protection Convention, 1960
- R114 Radiation Protection Recommendation, 1960
- C13 White Lead (Painting) Convention, 1921

Occupational Cancer

- C139 Occupational Cancer Convention, 1974
- R147 Occupational Cancer Recommendation, 1974





Guarding of Machinery

- C119 Guarding of Machinery Convention, 1963
- R118 Guarding of Machinery Recommendation, 1963

Maximum Weight

- C127 Maximum Weight Convention, 1967
- R128 Maximum Weight Recommendation, 1967

Codes of Practice & Guidelines



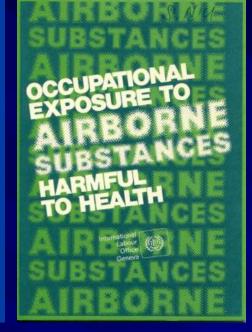
ILO also provides practical guidance in the form of codes of practice or guidelines. They are used as reference work by anyone in charge of formulating detailed regulations or framing occupational safety and health programmes.

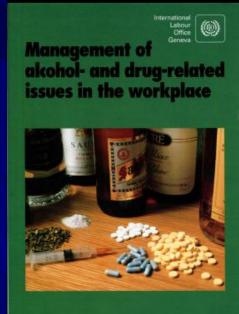
Guidelines on occupational safety and health management systems

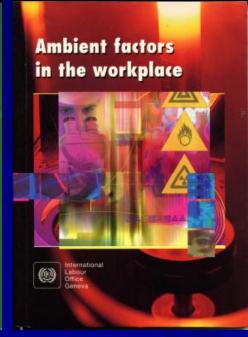
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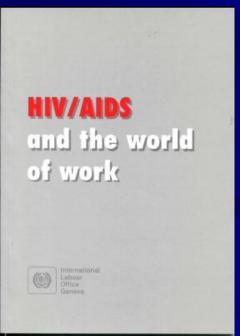


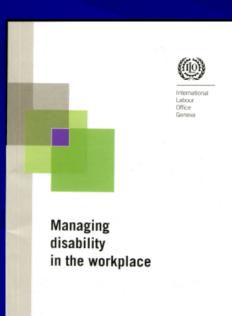
INTERNATIONAL LABOUR OFFICE-GEN

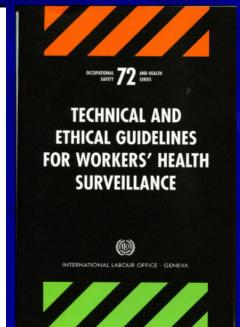


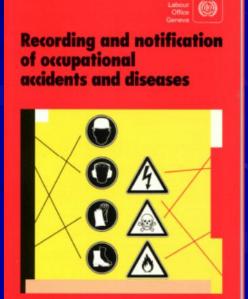


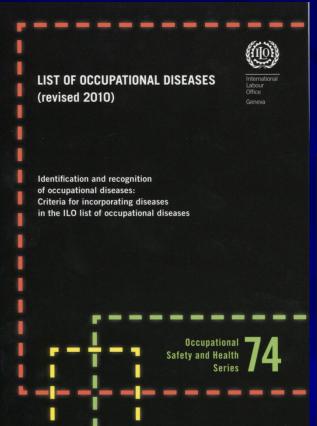




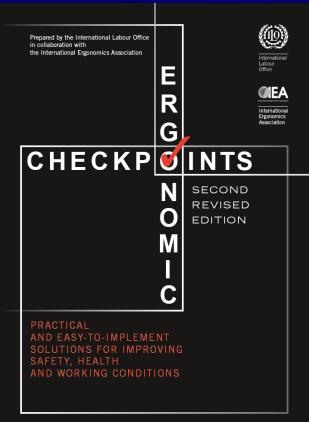


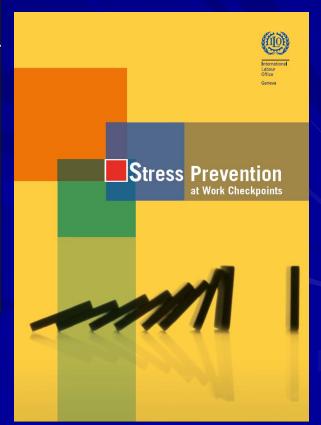












ILO Policy on the Improvement of Working Conditions and Environment



- Work should take place in a safe and healthy working environment;
- Conditions of work should be consistent with workers' well-being and human dignity;
- Work should offer real possibilities for personal achievement, self-fulfilment and service to society.

Basic Principles in Occupational Safety and Health



Responsibilities of the employer towards the health and safety of the workers in his/her employment;

Role of the competent authority: national policy, regulation, inspection, enforcement;



Basic Principles in Occupational Safety and Health

■Basic workers' rights: right to know, to participate, to stop work in case of imminent danger, etc.

Basic Principles in Occupational Safety and Health



Hierarchy of preventive measures(C.148,1977):

- technical measures,
- organizational measures,
- personal protective equipment;

And more recently (C. 176, 1995 Article 6):

- elimination of risks,
- control measures, minimization of risks,
- personal protection equipment;



Occupational Diseases

- Diseases caused by work have to be <u>discovered</u> and their victims be properly <u>treated and compensated</u>.
- Preventive and protective measures must be <u>taken</u> at the workplace.
- Definition of occupational diseases is usually set out in <u>legislation</u>.

ILO Instruments on Occupational Diseases



- > ILO Workmen's Compensation (Occupational Diseases)
 Convention (Revised), 1934 (No. 42)
- ➤ ILO Employment Injury Benefits Convention, 1964 Schedule I amended in 1980] (No. 121)
- > ILO List of Occupational Diseases Recommendation, 2002 (No. 194)

History and Development

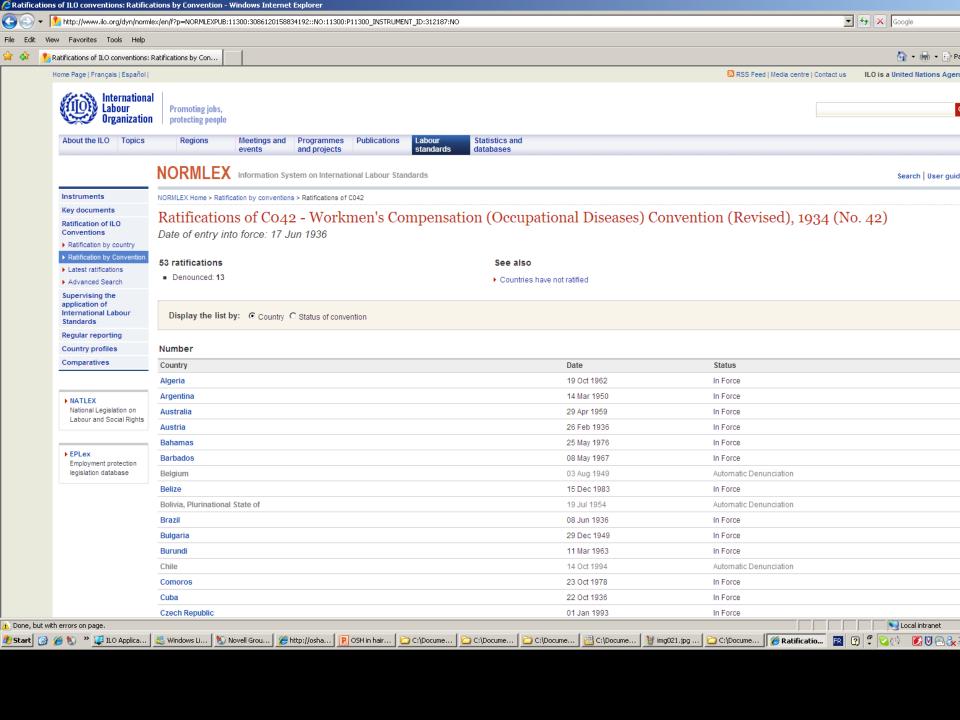
In 1934 - C. 42 Revised C.18

- lead poisoning
- 2. mercury poisoning,
- 3. anthrax
- 4. silicosis
- 5. phosphorus poisoning
- 6. arsenic poisoning
- 7. poisoning by benzene

- 8. poisoning by the halogen derivatives of hydrocarbons of the aliphatic series
- diseases due to radiation, and
- skin cancer (primary epitheliomatous cancer of the skin)

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Employment Injury Benefits Convention 1964 (No 121) Schedule I: List of occupational diseases (revised in 1980)

Country	Ratification date	Status
Belgium	22:04:1970	ratified
Bolivia	31:01:1977	ratified
Bosnia and Herzegovina	02:06:1993	ratified
Chile	30:09:1999	ratified
Democratic Republic of the Congo	05:09:1967	ratified
Croatia	08:10:1991	ratified
Cyprus	28:07:1966	ratified
Ecuador	05:04:1978	ratified
<u>Finland</u>	23:09:1968	ratified
Germany	01:03:1972	ratified
Guinea	11:08:1967	ratified
Ireland	09:06:1969	ratified
<u>Japan</u>	07:06:1974	ratified
Libyan Arab Jamahiriya	19:06:1975	ratified
Luxembourg	24:07:1972	ratified
The former Yugoslav Republic of Macedonia	17:11:1991	ratified
<u>Montenegro</u>	03:06:2006	ratified
<u>Netherlands</u>	02:08:1966	ratified
Senegal	25:04:1966	ratified
<u>Serbia</u>	24:11:2000	ratified
Slovenia	29:05:1992	ratified
Sweden	17:06:1969	ratified
<u>Uruguay</u>	28:06:1973	ratified
Bolivarian Republic of Venezuela	10:08:1982	ratified39

Ratified: 24 Conditional ratification: 0 Declared applicable: 0 Denounced: 0

S(

Occupation

- Pneum sclerogenic anthraco-silic silico-tubercu silicosis is ar the resultant
- 2. Bronchop by hard-mets
- 3. Bronchop by cotton o hemp or sisa
- Occupati sensitising recognised i in the work p
- 5. Extrinsic seguelae ca organic dusts legislation.
- 6. Diseases toxic compou
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- 11. Diseases caused by arse toxic compounds.
- 12. Diseases caused bly mero toxic compounds.
- 13. Diseases caused by lead of compounds.
- Diseases caused by fluor toxic compounds.
- 15. Diseases caused by disulfide.
- Diseases caused by halogen derivatives of alip aromatic hydrocarbons.
- Diseases caused by benz toxic homologues.
- Diseases caused by toxic amino-derivatives of benzer homologues.
- 19. Diseases caused by nitrogother nitric acid esters.
- 20. Diseases caused by glycols or ketones.
- 21. Diseases caused by as carbon monoxide, hydrogen c its toxic derivatives, hydrogen :
- 22. Hearing impairment ca noise.
- Diseases caused by (disorders of muscles, tendon joints, peripheral blood νε peripheral nerves).

24. Diseases caused by work in compressed air.	п
25. Diseases cause <mark>d by <u>ionising</u> radiations.</mark>	All work involving exposure to the action of ionising radiations.
26. Skin diseases caused by physical, chemical or biological agents not included under other items.	All work involving exposure to the risk concerned.
27. Primary epitheliomatous cancer of the skin caused by tar, pitch, bitumen, mineral oil, anthracene, or the compounds, products or residues of these substances.	п
28. Lung cancer or mesotheliomas caused by asbestos.	"
29. Infectious or parasitic diseases contracted in an occupation where there is a particular risk of contamination.	(a) Health or laboratory work. (b) Veterinary work. (c) Work handling animals, animal carcasses, parts of such carcasses, or merchandise which may have been contaminated by animals, animal caracasses, or parts of such carcasses. (d) Other work carrying a particular risk of contamination.

^{*}In the application of this Schedule the degree and type of exposure should be taken into account when appropriate.



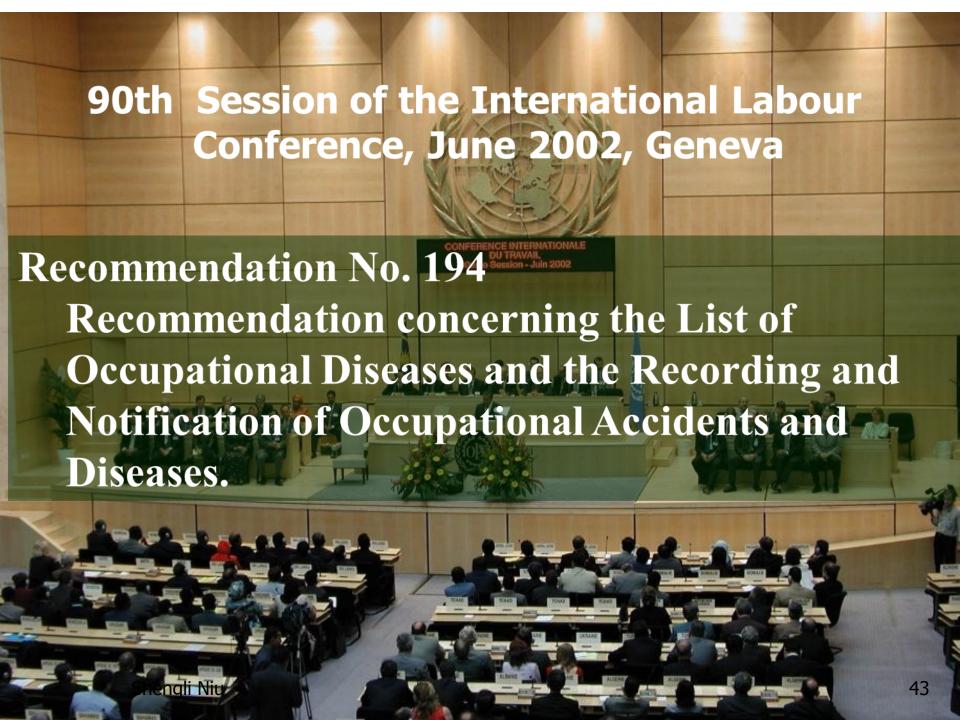
- Promotion of the inclusion of a range of internationally acknowledged occupational diseases in national lists.
- Harmonization of the development of policy on occupational diseases and in promoting their prevention.
- Serving as an example for countries establishing or revising their national lists.

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The Role & Impact of the ILO List

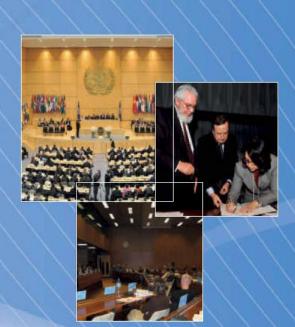
- Adding to the list would imply the extension of preventive measures to control the use of harmful substances and would assist a better health surveillance of workers.
- This effect can be expected both in countries that have ratified the Conventions and those that have not.





ILO List of Occupational Diseases

(revised 2010)



ANNEX

List of occupational diseases ¹ (revised 2010)

1.	Occupational diseases caused by exposure to agents arising from work activities
1.1.	Diseases caused by chemical agents
1.1.1.	Diseases caused by beryllium or its compounds
1.1.2.	Diseases caused by cadmium or its compounds
1.1.3.	Diseases caused by phosphorus or its compounds
1.1.4.	Diseases caused by chromium or its compounds
1.1.5.	Diseases caused by manganese or its compounds
1.1.6.	Diseases caused by arsenic or its compounds
1.1.7.	Diseases caused by mercury or its compounds
1.1.8.	Diseases caused by lead or its compounds
1.1.9.	Diseases caused by fluorine or its compounds
1.1.10.	Diseases caused by carbon disulfide
1.1.11.	Diseases caused by halogen derivatives of aliphatic or aromatic hydrocarbons
1.1.12.	Diseases caused by benzene or its homologues
1.1.13.	Diseases caused by nitro- and amino-derivatives of benzene or its homologues
1.1.14.	Diseases caused by nitroglycerine or other nitric acid esters
1.1.15.	Diseases caused by alcohols, glycols or ketones
1.1.16.	Diseases caused by asphyxiants like carbon monoxide, hydrogen sulfide, hydrogen cyanide
10 January	or its derivatives
1.1.17.	Diseases caused by acrylonitrile
1.1.18.	Diseases caused by oxides of nitrogen
1.1.19.	Diseases caused by vanadium or its compounds
1.1.20.	Diseases caused by antimony or its compounds
1.1.21.	Diseases caused by hexane
1.1.22.	Diseases caused by mineral acids
1.1.23.	Diseases caused by pharmaceutical agents
1.1.24.	Diseases caused by nickel or its compounds
1.1.25.	Diseases caused by thallium or its compounds
1.1.26.	Diseases caused by osmium or its compounds
1.1.27.	Diseases caused by selenium or its compounds
1.1.28.	Diseases caused by copper or its compounds
1.1.29.	Diseases caused by platinum or its compounds
1.1.30.	Diseases caused by tin or its compounds
1.1.31.	Diseases caused by zinc or its compounds
1.1.32.	Diseases caused by phosgene
1.1.33.	Diseases caused by corneal irritants like benzoquinone
1.1.34.	Diseases caused by ammonia
1.1.35.	Diseases caused by isocyanates
1.1.36.	Diseases caused by pesticides

¹ In the application of this list the degree and type of exposure and the work or occupation involving a particular risk of exposure should be taken into account when appropriate.

- 1.1.37. Diseases caused by sulphur oxides
- 1.1.38. Diseases caused by organic solvents
- 1.1.39. Diseases caused by latex or latex-containing products
- 1.1.40. Diseases caused by chlorine
- 1.1.41. Diseases caused by other chemical agents at work not mentioned in the preceding item where a direct link is established scientifically, or determined by methods appropriate t national conditions and practice, between the exposure to these chemical agents arising fror work activities and the disease(s) contracted by the worker

1.2. Diseases caused by physical agents

- 1.2.1. Hearing impairment caused by noise
- Diseases caused by vibration (disorders of muscles, tendons, bones, joints, peripheral bloovessels or peripheral nerves)
- 1.2.3. Diseases caused by compressed or decompressed air
- 1.2.4. Diseases caused by ionizing radiations
- 1.2.5. Diseases caused by optical (ultraviolet, visible light, infrared) radiations including laser
- 1.2.6. Diseases caused by exposure to extreme temperatures
- 1.2.7. Diseases caused by other physical agents at work not mentioned in the preceding item where a direct link is established scientifically, or determined by methods appropriate t national conditions and practice, between the exposure to these physical agents arising fror work activities and the disease(s) contracted by the worker

1.3. Biological agents and infectious or parasitic diseases

- 1.3.1. Brucellosis
- 1.3.2. Hepatitis viruses
- 1.3.3. Human immunodeficiency virus (HIV)
- 1.3.4. Tetanus
- 1.3.5. Tuberculosis
- 1.3.6. Toxic or inflammatory syndromes associated with bacterial or fungal contaminants
- 1.3.7. Anthrax
- 1.3.8. Leptospirosis
- 1.3.9. Diseases caused by other biological agents at work not mentioned in the preceding item where a direct link is established scientifically, or determined by methods appropriate t national conditions and practice, between the exposure to these biological agents arising fror work activities and the disease(s) contracted by the worker

2. Occupational diseases by target organ systems

2.1. Respiratory diseases

- 2.1.1. Pneumoconioses caused by fibrogenic mineral dust (silicosis, anthraco-silicosis, asbestosis)
- 2.1.2. Silicotuberculosis
- 2.1.3. Pneumoconioses caused by non-fibrogenic mineral dust
- 2.1.4. Siderosis
- 2.1.5. Bronchopulmonary diseases caused by hard-metal dust
- Bronchopulmonary diseases caused by dust of cotton (byssinosis), flax, hemp, sisal or sugarcane (bagassosis)

- 2.1.7. Asthma caused by recognized sensitizing agents or irritants inherent to the work process
- 2.1.8. Extrinsic allergic alveolitis caused by the inhalation of organic dusts or microbially contaminated aerosols, arising from work activities
- 2.1.9. Chronic obstructive pulmonary diseases caused by inhalation of coal dust, dust from stone quarries, wood dust, dust from cereals and agricultural work, dust in animal stables, dust from textiles, and paper dust, arising from work activities
- 2.1.10. Diseases of the lung caused by aluminium
- 2.1.11. Upper airways disorders caused by recognized sensitizing agents or irritants inherent to the work process
- 2.1.12. Other respiratory diseases not mentioned in the preceding items where a direct link is established scientifically, or determined by methods appropriate to national conditions and practice, between the exposure to risk factors arising from work activities and the disease(s) contracted by the worker

2.2. Skin diseases

- 2.2.1. Allergic contact dermatoses and contact urticaria caused by other recognized allergy-provoking agents arising from work activities not included in other items
- 2.2.2. Irritant contact dermatoses caused by other recognized irritant agents arising from work activities not included in other items
- 2.2.3. Vitiligo caused by other recognized agents arising from work activities not included in other items
- 2.2.4. Other skin diseases caused by physical, chemical or biological agents at work not included under other items where a direct link is established scientifically, or determined by methods appropriate to national conditions and practice, between the exposure to risk factors arising from work activities and the skin disease(s) contracted by the worker

2.3. Musculoskeletal disorders

- Radial styloid tenosynovitis due to repetitive movements, forceful exertions and extreme
 postures of the wrist
- 2.3.2. Chronic tenosynovitis of hand and wrist due to repetitive movements, forceful exertions and extreme postures of the wrist
- 2.3.3. Olecranon bursitis due to prolonged pressure of the elbow region
- 2.3.4. Prepatellar bursitis due to prolonged stay in kneeling position
- 2.3.5. Epicondylitis due to repetitive forceful work
- 2.3.6. Meniscus lesions following extended periods of work in a kneeling or squatting position
- 2.3.7. Carpal tunnel syndrome due to extended periods of repetitive forceful work, work involving vibration, extreme postures of the wrist, or a combination of the three
- 2.3.8. Other musculoskeletal disorders not mentioned in the preceding items where a direct link is established scientifically, or determined by methods appropriate to national conditions and practice, between the exposure to risk factors arising from work activities and the musculoskeletal disorder(s) contracted by the worker

2.4. Mental and behavioural disorders

- 2.4.1. Post-traumatic stress disorder
- 2.4.2. Other mental or behavioural disorders not mentioned in the preceding item where a direct link is established scientifically, or determined by methods appropriate to national conditions and practice, between the exposure to risk factors arising from work activities and the mental and behavioural disorder(s) contracted by the worker

Occupational cancer Cancer caused by the following agents

3.1.1. Asbestos

3.1.2. Benzidine and its salts

3.1.3. Bis-chloromethyl ether (BCME)

3.1.4. Chromium VI compounds

3.1.5. Coal tars, coal tar pitches or soots

3.1.6. Beta-naphthylamine

3.1.7. Vinyl chloride

3.1.8. Benzene

3.1.9. Toxic nitro- and amino-derivatives of benzene or its homologues

3.1.10. Ionizing radiations

 Tar, pitch, bitumen, mineral oil, anthracene, or the compounds, products or residues of these substances

3.1.12. Coke oven emissions

3.1.13. Nickel compounds

3.1.14. Wood dust

3.1.15. Arsenic and its compounds

3.1.16. Beryllium and its compounds

3.1.17. Cadmium and its compounds

3.1.18. Erionite

3.1.19. Ethylene oxide

3.1.20. Hepatitis B virus (HBV) and hepatitis C virus (HCV)

3.1.21. Cancers caused by other agents at work not mentioned in the preceding items where a direct link is established scientifically, or determined by methods appropriate to national conditions and practice, between the exposure to these agents arising from work activities and the cancer(s) contracted by the worker

4. Other diseases

- 4.1. Miners' nystagmus
- 4.2. Other specific diseases caused by occupations or processes not mentioned in this list where a direct link is established scientifically, or determined by methods appropriate to national conditions and practice, between the exposure arising from work activities and the disease(s) contracted by the worker

ILO list of occupational diseases (revised 2010)

The List of Occupational Diseases Recommendation, 2002 (No. 194) requires the national lists of occupational diseases to comprise, to the extent possible, the diseases contained in the list of occupational diseases as annexed to it.

Based on the work of two meetings of experts, the ILO Governing Body approved a new list of occupational diseases on 25 March 2010 during its 307th Session. This new list replaces the preceding one in the annex of Recommendation No. 194 which was adopted in 2002.

The new list includes a range of internationally recognized occupational diseases, from illnesses caused by chemical, physical and biological agents to respiratory and skin diseases, musculo-skeletal disorders and occupational cancer. Mental and behavioural disorders have for the first time been specifically included in the ILO list. This list also has open items in all the sections dealing with the afore-mentioned diseases. The open items allow the recognition of the occupational origin of diseases not specified in the list if a link is established between exposure to risk factors arising from work activities and the disorders contracted by the worker.

The criteria used by the tripartite experts for deciding what specific diseases be considered in the updated list include that: there is a causal relationship with a specific agent, exposure or work process; they occur in connection with a specific work environment and/or in specific occupations; they occur among the groups of workers concerned with a frequency which exceeds the average incidence within the rest of the population; and there is scientific evidence of a clearly defined pattern of disease following exposure and plausibility of cause.

This new list of occupational diseases reflects the state-of-the-art development in the identification and recognition of occupational diseases in the world of today. It indicates clearly where prevention and protection should take place. This ILO list represents the latest worldwide consensus on diseases which are internationally accepted as caused by work. This list can serve as a model for the establishment, review and revision of national lists of occupational diseases. The world's working population and their families will benefit from this new list.

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