

INTERNATIONAL LABOUR ORGANIZATION

**Identification and recognition of occupational diseases: Criteria for incorporating diseases in the ILO list of occupational diseases**

**Meeting of Experts on the Revision of the List of Occupational Diseases (Recommendation No. 194)**  
(Geneva, 27–30 October 2009)





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## 1. Definitions of occupational diseases

1. According to the Protocol of 2002 to the Occupational Safety and Health Convention, 1981, the term “occupational disease” covers any disease contracted as a result of an exposure to risk factors arising from work activity.
2. The ILO Employment Injury Benefits Recommendation, 1964 (No. 121), Paragraph 6(1), defines occupational diseases in the following terms: “Each Member should, under prescribed conditions, regard diseases known to arise out of the exposure to substances and dangerous conditions in processes, trades or occupations as occupational diseases.”
3. Two main elements are present in the definition of an occupational disease:
  - the causal relationship between exposure in a specific working environment or work activity and a specific disease; and
  - the fact that the disease occurs among a group of exposed persons with a frequency above the average morbidity of the rest of the population.

## 2. General criteria for identification and recognition of occupational diseases

4. The causal relationship is established on the basis of clinical and pathological data, occupational background and job analysis, identification and evaluation of occupational risk factors and of the role of other risk factors.
5. Epidemiological and toxicological data are useful for determining the causal relationship between a specific occupational disease and its corresponding exposure in a specific working environment or work activity.
6. As a general rule, the symptoms are not sufficiently characteristic to enable an occupational disease to be diagnosed as such without the knowledge of the pathological changes engendered by the physical, chemical, biological or other factors encountered in the exercise of an occupation.
7. It is therefore normal that, as a result of improvements in knowledge regarding the mechanisms of action of the factors in question, the steady increase in the number of substances employed, and the quality and variety of suspected agents, it becomes more and more feasible to make an accurate diagnosis, while the range of diseases recognized as occupational in origin is broadening.
8. The recognition of a disease as being occupational is a specific example of clinical decision-making or applied clinical epidemiology. Deciding on the cause of a disease is not an “exact science” but rather a question of judgement based on a critical review of all the available evidence, which should include a consideration of the following:
  - *Strength of association.* The greater the impact of an exposure on the occurrence or development of a disease, the stronger the likelihood of a causal relationship.
  - *Consistency.* Different research reports have generally similar results and conclusions.

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- *Specificity.* Exposure to a specific risk factor results in a clearly defined pattern of disease or diseases.
  - *Temporality or time sequence.* The exposure of interest preceded the disease by a period of time consistent with any proposed biological mechanism.
  - *Biological gradient.* The greater the level and duration of exposure, the greater the severity of diseases or their incidence.
  - *Biological plausibility.* From what is known of toxicology, chemistry, physical properties or other attributes of the studied risk or hazard, it makes biological sense to suggest that exposure leads to the disease.
  - *Coherence.* A general synthesis of all the evidence (e.g. human epidemiology and animal studies) leads to the conclusion that there is a cause–effect relationship in a broad sense and in terms of general common sense.
  - *Interventional studies.* Sometimes, a primary preventative trial may verify whether removing a specific hazard or reducing a specific risk from the working environment or work activity eliminates the development of a specific disease or reduces its incidence.

### 3. Criteria for identification and recognition of an individual disease

9. The exposure–effect relationship (relation between exposure and the severity of the impairment in the subject) and the exposure–response relationship (connection between exposure and the relative number of subjects affected) are important elements for the determination of a causal relationship. Research and epidemiological studies have greatly contributed in this respect. Better knowledge of the causal relationship has allowed us to achieve a better medical definition of occupational diseases. As a consequence, the legal definition of occupational diseases, which was rather a complex problem, is becoming more and more linked to the medical definition and criteria.

10. Legal provisions on compensation for victims vary from country to country. Article 8 of the Employment Injury Benefits Convention, 1964 [Schedule I amended in 1980] (No. 121), which indicates the various possibilities regarding the form of the identification and recognition of occupational diseases entitling workers to compensation benefits, states that:

*Each Member shall:*

- (a) prescribe a list of diseases, comprising at least the diseases enumerated in Schedule I to this Convention, which shall be regarded as occupational diseases under prescribed conditions; or
- (b) include in its legislation a general definition of occupational diseases broad enough to cover at least the diseases enumerated in Schedule I to this Convention; or
- (c) prescribe a list of diseases in conformity with clause (a), complemented by a general definition of occupational diseases or by other provisions for establishing the occupational origin of diseases not so listed or manifesting themselves under conditions different from those prescribed.

11. Point (a) is called the “list system”, point (b) is the “general definition system” or overall coverage system, and point (c) is generally referred to as the “mixed system”.



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12. The “list system” covers only a certain number of occupational diseases, and has the advantage of listing diseases for which there is a presumption that they are of occupational origin. This simplifies the matter for all parties since it is frequently very difficult, if not impossible, to prove or disprove that a disease is directly attributable to the victim's occupation. It also has the important advantage of indicating clearly where prevention should focus.
  13. The “general definition system” theoretically covers all occupational diseases; it affords the widest and most flexible protection, but leaves it to the victim to prove the occupational origin of the disease. In practice, it also often implies that arbitration on individual cases is necessary. Furthermore, no emphasis is placed on specific prevention.
  14. Because of this marked difference between the “general definition” and “list” systems, the “mixed system” has been favoured by many ILO member States because it combines the advantages of the other two without their disadvantages.

#### **4. Criteria for incorporating a disease into the ILO list of occupational diseases**

15. The List of Occupational Diseases Recommendation, 2002 (No. 194) was adopted at the 90th Session of the International Labour Conference in 2002.
16. The current list annexed to Recommendation No. 194 was based on Annex B: Proposed list of occupational diseases of the ILO code of practice on recording and notification of occupational accidents and diseases, 1996. This list of occupational diseases took into account the lists in force and national practice in 76 different States at the time of its preparation.<sup>1</sup>
17. The Committee on Occupational Accidents and Diseases which was established and entrusted by the 90th Session of the International Labour Conference in 2002 to work on the List of Occupational Diseases Recommendation, 2002 (No. 194), requested the Governing Body of the International Labour Office to convene the first of the tripartite meetings of experts referred to in Paragraph 3 of the Recommendation as a matter of priority.
18. The Committee on Occupational Accidents and Diseases expected that, in addition to examining the Annex to the Recommendation, the existing national and other lists of occupational diseases, and the comments received from member States, the Meeting should consider all the amendments submitted on the Annex to the Conference Committee.

#### **5. Updating the list of occupational diseases**

19. The Meeting of Experts on Updating the List of Occupational Diseases convened by the ILO Governing Body took place in December 2005 and worked on a proposed list of

<sup>1</sup> This list was proposed by the Informal Consultation on the Revision of the List of Occupational Diseases (Geneva, 9–12 December 1991). The Informal Consultation worked with a document based on the review of laws and practices on occupational diseases in the member States concerning their diagnosis, reporting and evaluation for compensation purposes. The proposed list was a reflection of the best scientific judgement of the consultants present; no comprehensive criteria documents were prepared for guidance on the inclusion of new items.

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occupational diseases included in a working document prepared by the Office on the basis of:

- (i) all the amendments to the list of occupational diseases annexed to the List of Occupational Diseases Recommendation, 2002 (No. 194) submitted to the Committee on Occupational Accidents and Diseases of the 90th Session of the International Labour Conference in 2002;
- (ii) the replies to the Office questionnaire on the list of occupational diseases from governments, employers' and workers' organizations of the member States; and
- (iii) the analysis of about 50 national and other lists of occupational diseases collected by the Office and the evaluation of international scientific developments in the identification of occupational diseases.

**20.** The Meeting examined and made changes to the list proposed by the Office. The report of the Meeting included two proposed lists of occupational diseases, which reflected the positions of the Government and Worker experts, on the one hand, and the Employer experts, on the other hand. The differences were that the Employer experts' list included, as an introduction, a set of general criteria for identifying occupational diseases and had no open-ended items. This set of criteria was expected to be applied to all the individual disease items. The list of the Worker and the Government experts included open-ended items and no set of general criteria. The individual items in the two lists were identical.

**21.** The Governing Body decided at its 295th Session in March 2006 to convene another meeting of experts to complete the work accomplished by the Meeting already held in December 2005 as mentioned above. To that end, the Office was invited to proceed with consultations for the purpose of preparing a common ground before the convening of the next meeting.

## **6. Consultations for the purpose of preparing a common ground**

**22.** The Governing Body requested the Director-General to make a proposal for the meeting during the 2008–09 biennium. The Office proposed to hold the meeting in October 2009, and that it would last for four days with the participation of seven Government, seven Employer and seven Worker experts from all over the world. The Governing Body approved the Office proposal at its 301st Session in March 2008. The next meeting of experts is scheduled to take place from 27 to 30 October 2009 at the ILO in Geneva, Switzerland.

**23.** Three preliminary informal consultations were conducted on 18 April 2007 (with the Employers), on 25 May 2007 (with the Workers) and on 21 September 2007 (with both the Employers and Workers). On the basis of these preliminary informal consultations, the first tripartite consultation was held on 4 April 2008. A second tripartite consultation took place on 12 May 2009.

**24.** At the first tripartite consultation, agreement was reached on a number of points regarding the revised list of occupational diseases. These included:

- (i) introducing a footnote after the title "List of occupational diseases" which may read: "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.";

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- (ii) keeping and modifying the open items in the list;
  - (iii) making editorial changes to the list format including to signify that the diseases in the list are occupational by nature and caused by exposure arising from work activities;
  - (iv) including no general criteria in the list. The general criteria proposed by the Employers at the 2005 Meeting of Experts are for the experts to use as a basis for their work during the 2009 Meeting;
  - (v) consenting to the scope and contents of the revised list.
- 25.** After the first tripartite consultation, the scope and contents of the revised list of occupational diseases was reviewed and agreed by the tripartite consultation participants. In this regard, all the Government Experts at the Meeting of Experts on Updating the List of Occupational Diseases (13–20 December 2005) were also consulted by email. The scope and contents of the revised list of occupational diseases, which is the common ground achieved through consultations, was reported to the Governing Body of the ILO at its 303rd Session in November 2008.
- 26.** The Governing Body decided that the next Meeting of Experts on the Revision of the List of Occupational Diseases (Recommendation No. 194) should be held from 27 to 30 October 2009 in Geneva, Switzerland, and be attended by seven experts nominated after consultation with governments, seven experts nominated after consultation with the Employers' group, and seven experts nominated after consultation with the Workers' group of the Governing Body. Governments of the following countries were invited to nominate experts to attend the meeting: Chile, Canada, China, France, Russian Federation, South Africa and Thailand. Should any of them fail to nominate a participant, the Governments of the following countries will be approached: Australia, Ecuador, India, Italy, Malaysia, Poland and Senegal.
- 27.** The Governing Body also decided the following agenda for the Meeting:

To complete the work accomplished by the Meeting of Experts on Updating the List of Occupational Diseases (13–20 December 2005), on the basis of the common ground about the scope and contents of the revised List of Occupational Diseases achieved through the tripartite consultations conducted by the Office, further to the request made by the Governing Body at its 295th Session in March 2006.

## **7. The common ground achieved through tripartite consultations**

### **Scope and contents of the revised list of occupational diseases**

- 28.** The definition of the term “occupational disease” in the Protocol of 2002 to the Occupational Safety and Health Convention, 1981 (No. 155), and the definition of occupational diseases in the Employment Injury Benefits Recommendation, 1964 (No. 121), will define the scope within which the updating of the list of occupational diseases annexed to Recommendation No. 194 by the Meeting will take place.
- 29.** In view of the fact that open-ended items do exist in the current list annexed to Recommendation No. 194, modifications of these items will be based on the amendments submitted to the Committee on Occupational Accidents and Diseases of the 90th Session

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of the International Labour Conference in 2002 and be consistent with the definitions of occupational diseases referred to in paragraph 28 above.

30. The diseases included in Schedule I of the Employment Injury Benefits Convention, 1964 (No. 121), will all be included.
  31. Individual diseases items in the lists proposed by the Employer experts and by the Government and Worker experts at the 2005 Meeting of Experts which did not raise any controversy during the 2005 Meeting of Experts will, in principle, be retained.
  32. New occupational diseases not included in the lists proposed by the Employer experts and by the Government and Worker experts at the 2005 Meeting of Experts will not be considered unless there is a consensus among the experts at the forthcoming 2009 meeting.
  33. In December 2008, the tripartite participants of the consultations identified the following problematic disease items and made the following proposals for modifications:
    - 1.2. Diseases caused by physical agents
      - 1.2.5. Radiofrequency radiations
    - 1.3. Diseases caused by biological agents
      - 1.3.7. Malaria
    2. Diseases by target organ systems
      - 2.1. Occupational respiratory diseases
        - 2.1.8. Extrinsic Allergic Alveolitis to include mists from contaminated oils
      - 2.3. Occupational musculoskeletal disorders
        - 2.3.7. Carpal tunnel syndrome due to extended periods of repetitive forceful work, work involving vibrations, extreme postures of the wrist, or a combination of the three
      - 2.4. Mental and behavioural disorders to be replaced by “psychological disorders”
    3. Occupational cancer
      - 3.1. Cancer caused by the following agents
        - 3.1.20. Formaldehyde
        - 3.1.21. Hepatitis B Virus (HBV) and C Virus (HCV)
        - 3.1.X. Crystalline silica (possible inclusion as a carcinogen)
- Open items 1.1.41, 1.2.8, 1.3.10, 2.1.12, 2.2.4, 2.3.8, 2.4.2, 3.1.2 and 4.2

... where a direct link is established scientifically, or determined by methods appropriate to national conditions and practice, between the exposure to agents arising from work activity and the disease(s) contracted by the worker.

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**8. Decision-making process at the Meeting of Experts on the Revision of the List of Occupational Diseases Recommendation, 2002 (No. 194) (Geneva, 27–30 October 2009)**

- 34.** Decisions to incorporate specific diseases in the updated List of Occupational Diseases need to take into account the following general criteria:
- (i) there is a causal relationship with a specific agent, exposure or work process;
  - (ii) they occur in connection with the work environment and/or in specific occupations;
  - (iii) they occur among the groups of persons concerned with a frequency which exceeds the average incidence within the rest of the population; and
  - (iv) there is scientific evidence of a clearly defined pattern of disease following exposure and plausibility of cause.
- 35.** These four general criteria for the identification of occupational diseases are not intended to be included in the updated List of Occupational Diseases itself. They will be considered in the review and examination of each and every individual diseases items to be incorporated in the updated List of Occupational Diseases by the experts who will participate in the Meeting of Experts on Updating the List of Occupational Diseases to be held in 2009.
- 36.** Decision to incorporate an individual disease into the ILO List reflects the best expert personal judgement based on the expert's own knowledge and experiences. When proposing a new disease to be included in the ILO List, justification should be given. This disease should preferably have been included in national lists of occupational diseases or have been compensated in national practices in at least more than one country.
- 37.** Based on the agreements reached through the tripartite consultations, it is essential for the success of the October 2009 Meeting of Experts that all experts at the Meeting endorse the above-outlined decision-making process as well as the proposed programme of work for the Meeting of Experts on the Revision of the List of Occupational Disease (Recommendation No. 194) (Geneva, 27–30 October 2009) with due consideration to the technical documents prepared by the Office which will serve as the basis for the work of the 2009 Meeting of Experts.