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**NATIONAL OCCUPATIONAL HEALTH STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GBZ 66-2002

**Diagnostic Criteria of Occupational Acute Fluoro hydrocarbon
Poisoning
(English Translation)**

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Foreword

Article 6.1 of this standard is recommended and the remainder is mandatory.

According to the "People's Republic of China Occupational Disease Prevention Law" to develop this standard. Since the implementation of the standard date, the original standard GB 4867-1996 inconsistent with this standard, the standard shall prevail.

In the organic fluorine materials in the production, processing, use and other professional activities in the process of inhalation of organic fluorine monomer, pyrolysis gas, residual Liquid gas and fluoropolymer pyrolysis gas cause acute poisoning. This standard highlights the characteristics of acute organic fluoride poisoning. According to organic fluoride poison the role of the main target organ respiratory system damage was diagnosed hierarchically modified, the toxic myocardial damage included in the moderate Poison, so that the diagnosis of this standard is more clear, reasonable and easy to use.

Appendix A to this standard is an informative appendix and Appendix B is a normative appendix.

This standard is proposed and centralized by the Ministry of Health of the People's Republic of China.

1 Scope

This standard specifies the diagnostic criteria and principles of occupational acute organic fluorosis.

This standard applies to the production of organic fluorine materials, processing, use and other processes, inhalation of tetrafluoroethylene, hexafluoropropylene and other monomers;

Fluoro-methyl chloride and other pyrolysis gases, residual liquid gas; polytetrafluoroethylene, polyfluoroethylene propylene, polychlorotrifluoroethylene and other fluoropolymer heat Gas poisoning caused by acute poisoning.

Acute organic fluoride pesticide poisoning and fluoride ether poisoning is not within the scope of this standard.

2 Normative reference documents

The terms of the following documents are hereby incorporated by reference into this standard. Any date that references the date of the document all subsequent amendments (excluding corrigenda) or revisions do not apply to this standard, however, the parties to the agreement are able to use the latest version of these documents. Those who do not mind the date of the reference file, its latest the version applies to this standard.

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3 Diagnostic principles

According to the exact short-term, excessive organic fluorine gas inhalation history, combined with clinical manifestations, X-ray and ECG Check the results, comprehensive analysis, excluding other diseases can be diagnosed later.

4 Observation object

Inhalation of organic fluorine gas, the upper respiratory tract infection-like symptoms, observed 72h symptoms gradually improved, no heart and lung injury.

5.1.1 Mild poisoning

Headache, dizziness, cough, sore throat, nausea, chest tightness, fatigue and other symptoms, the lungs are scattered dry rales or a small amount of wet Rales X-ray chest see the lungs, lungs and lungs enhanced texture, edge blurred and other signs, in line with acute bronchitis, Clinical signs of pericarditis.

5.1.2 Moderate poisoning

Those who have one of the following conditions can be diagnosed as moderate poisoning.

- a) mild clinical manifestations of mild poisoning increased chest tightness, chest pain, palpitations, difficulty breathing, irritability and mild Cyanosis, lungs, limited respiratory sounds, lungs have more dry rales or wet rales. X-ray examination of lungs Enhanced, with a wide network of shadows, and scattered in the small dot-like shadow, so that the lungs through the brightness reduction, or see the level of cracked Wide, bronchial cuff sign, occasionally Kerley's B line, consistent with interstitial pulmonary edema clinical signs.
- b) Symptoms and signs as above, two, lower lung field lungs increased texture, patchy shadow along the distribution of lung texture, more common in the, Within the band, widely intensive when combined into a film, in line with the clinical signs of bronchial pneumonia.

5.1.3 Severe poisoning

Where any of the following circumstances, can be diagnosed as severe poisoning.

- a) acute alveolar pulmonary edema;
- b) acute respiratory distress syndrome (ARDS);
- c) toxic myocarditis;
- d) with mediastinal emphysema, subcutaneous emphysema, pneumothorax.

5.2 Fluoropolymer dust heat

Inhalation of organic fluoropolymer pyrolysis, the emergence of chills, fever, chills, muscle soreness and other metal fever symptoms, may be associated with cough, chest tight feeling, headache, nausea, vomiting, etc., generally within 24 ~ 48h subsided.

6.1 Principles of treatment

6.1.1

Where there is a clear history of accidental inhalation of organic fluorine gas, with or without symptoms, must immediately leave the scene, absolutely Bed rest, carry out the necessary medical examination and preventive treatment, and observe 72h.

6.1.2

early oxygen, concentration is generally controlled within 50% to 60%, with caution with pure oxygen and hyperbaric oxygen. Acute respiratory distress Syndrome can be applied when the lower pressure of positive end expiratory pressure (PEEP0.5kPa or so).

6.1.3

Early, adequate, short-range application of glucocorticoid.

Stressed that all the observation and poisoning patients in place to give glucocorticoid intravenous and other preventive treatment. Poisoned patients according to Condition severity, in the first day after poisoning may be appropriate to increase the dose, after a sufficient amount of short-term intravenous administration. More moderate poisoning patients, for the prevention and treatment of pulmonary fibrosis, can continue in the acute phase after a small dose of intermittent application of glucocorticoids.

6.1.4

to maintain airway flow, can be given bronchial spasm and other ultrasonic atomization inhalation. A lot of foam sputum should be used early to defoamer dimethyl silicone oil (defoaming net). Difficult to occur after the use of medical treatment is invalid after tracheotomy.

6.1.5

toxic myocarditis and other clinical signs, the treatment principle is generally the same with the internal medicine.

6.1.6

rational use of antibiotics, prevention and treatment of secondary infection.

6.1.7

Fluoropolymer dust heat, generally given symptomatic treatment. Where recurrent disease, should be given the treatment of pulmonary fibrosis.

6.2.1 Cure standards

Acute poisoning caused by the clinical manifestations disappeared, chest X-ray and other related test results returned to normal for the cure.

6.2.2 poisoned patients cured, can restore the original work; such as patients after poisoning left lung, heart failure, should be transferred from the original for post, and regular review.

7 Correctly use the instructions in this standard

See Appendix A (informative), Appendix B (normative).

Appendix A

(Informative)

Correctly use the instructions in this standard A.1 The use of this standard, must have a clear occupational exposure to organic fluorine gas accident history. Fluoropolymer itself is