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

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**Diagnostic Criteria of Occupational Acute Chlorine Poisoning
(English Translation)**

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Foreword

Section 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 4866-1996 inconsistent with this standard, subject to this standard.

In the short period of professional activities inhalation of a large number of chlorine, can occur acute poisoning. To protect the health of the contact person, in 1996 the state promulgated GB 4866-1996.

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

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

This standard by the Shanghai Sixth People's Hospital, Chongqing Tianyuan Chemical Plant workers hospital is responsible for drafting.

This standard is interpreted by the Ministry of Health of the People's Republic of China.

Diagnostic criteria for occupational acute chlorine poisoning Occupational acute chlorine poisoning is in the course of work, short-term inhalation of a large number of chlorine

caused by acute respiratory failure Harm the main systemic disease.

1 Scope

This standard specifies the diagnostic criteria and principles of occupational acute chlorine poisoning.

This standard applies to the work of exposure to chlorine caused by acute poisoning, but also for chlorine oxides, sulfides, phosphorus Chemical and other similar inorganic chlorine compounds, such as hydrogen chloride, chloric acid, chlorosulfonic acid and other acute poisoning; non-occupational poisoning can also participate According to use.

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.

GBZ 70 diagnostic criteria for pneumoconiosis

3 Diagnostic principles

According to short-term inhalation of a large number of chlorine after the rapid onset, combined with clinical symptoms, signs, chest X-ray performance, reference Site labor hygiene survey results, comprehensive analysis, excluding other causes of respiratory diseases, can be diagnosed.

4 Stimulus response

There is a transient eye and upper respiratory tract mucosal irritation symptoms, no positive signs of the lungs or occasional dry rales, chest X Line no abnormal performance.

5.1 Mild poisoning

Clinical manifestations in line with acute tracheobronchitis or bronchial inflammation. Such as the emergence of cough, there may be a small amount of sputum, chest tightness, the lungs are scattered in the dry, wet rales or wheeze, chest X-ray performance can be no abnormal or visible lung field have increased lung texture, Thicker, extended, blurred edges.

5.2 Moderate poisoning

Where clinical manifestations meet one of the following diagnoses.

a) Acute chemical bronchial pneumonia. If there is cough, expectoration, shortness of

breath, chest tightness, etc., may be associated with mild cyanosis; lungs There are dry, wet rales; chest X-ray performance of the lower part of the lungs along the lungs along the distribution of irregular patterns were spotted or small patch Border blurred, partially dense or fused with each other.

b) Limb alveolar pulmonary edema. The above symptoms, signs outside the chest X-ray shows a single or multiple localized contours Clear, high density of sheet shadows.

c) interstitial pulmonary edema. Such as chest tightness, shortness of breath is more obvious; lung breath sounds slightly reduced, no obvious rales; chest X-ray performance of the increase in lung texture blurred, hilar shadow widening realm is unclear, the two lungs scattered in the dotted shadows and reticular shadows Brightness reduction, often seen horizontal crack thickening, and sometimes visible bronchial cuff sign and grams of the B line.

d) Asthma-like episodes. Symptoms of asthma mainly, breath is particularly difficult, there are cyanosis, chest tightness; lung diffuse wheeze;

Chest X-ray can be found without exception.

5.3 Severe poisoning

Meet one of the following.

a) diffuse alveolar pulmonary edema or central pulmonary edema;

b) acute respiratory distress syndrome (ARDS);

c) severe suffocation;

d) the emergence of pneumothorax, mediastinal emphysema and other serious complications.

6.1.1 Field processing

Immediately out of contact, keep quiet and warm. The presence of stimulating response, close observation of at least 12 h, and to symptomatic Reason. Inhalation should be more bed rest, so as to avoid exacerbations after the event, and the application of spray, oxygen; if necessary intravenous injection Glucocorticoid, is conducive to control the disease progression.

6.1.2 Reasonable oxygen therapy

Can choose the appropriate method to oxygen, inhaled oxygen concentration should not exceed 60%, so that arterial oxygen pressure maintained at 8 ~ 10 kPa.

Such as the occurrence of severe pulmonary edema or acute respiratory distress syndrome, given nasal mask continuous positive pressure ventilation (CPAP) or

tracheotomy Positive end-expiratory pressure (PEEP) therapy, end-expiratory pressure should be about 0.5 kPa (5 cmH₂O).

6.1.3 Application of glucocorticoids

Should be early, adequate, short-range use, and prevent side effects.

6.1.4 to maintain airway patency can be given inhalation therapy, bronchial antispasmodic agents, to the foam can be used dimethyl silicone oil (defoaming net); if indications should be timely implementation of tracheotomy.

6.1.5 Prevention of secondary infection.

6.1.6 to maintain blood pressure stability, a reasonable grasp of infusion and the application of diuretics, correct acid and electrolyte and electrolyte disorders, good care and Nutritional support and so on.

6.2.1 Cure standards

Caused by acute poisoning caused by symptoms, signs, chest X-ray abnormalities and other basic recovery, the patient's health to poison Pre-level.

6.2.2 poisoned patients after cure, can restore the original work.

6.2.3 poisoning, if often asthma-like seizures, should be transferred from the stimulating gas work.

7 Correctly use the instructions in this standard

See Appendix A (informative), see Appendix B, C (normative) Appendix A (Informative) Correctly use the instructions in this standard A.1 The classification of this standard is a comprehensive clinical analysis of various clinical signs, consistent with the corresponding diagnostic criteria to reach to be more comprehensive understanding of the disease, easy to master and apply.

A.2 stimulated response to contact with chlorine after a transient reaction, has not yet reached the degree of poisoning, it is not treated as poisoning.

A.3 to diffuse alveolar pulmonary edema and acute respiratory distress syndrome, the estimated prognosis, guidance and treatment are helpful Help, and for clinical case analysis, statistical information, research work to provide an objective indicator, it is of practical significance.

Such as clinical examination of complete data, close follow-up observation, help the correct clinical diagnosis.

A.4 diagnostic grade should be in the acute end of treatment of acute poisoning, comprehensive analysis before conclusion.