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

GBZ 31-2002

**Diagnostic Criteria of Occupational Acute Hydrogen Sulfide
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 8789-1988 inconsistent with this standard, the standard shall prevail.

Occupational activities in contact with hydrogen sulfide can cause acute poisoning. In order to protect the health of contacts, effective prevention and treatment Hydrogen sulfide poisoning, has released GB 8789-1988. This standard is a revision.

The revised standard highlights the characteristics of acute hydrogen sulfide poisoning. According to the role of hydrogen sulfide in the main target organ central nervous system System and respiratory system damage were diagnosed hierarchically modified for other common organs caused by hydrogen sulfide such as heart and liver damage Attached to the standard Appendix A. Standard also affirmed the role of hyperbaric oxygen on acute hydrogen sulfide poisoning, especially in the heavy Disability disorder patients. According to GB/T 16584.2-1997 "Occupational disease diagnosis standards drafting and presentation rules Part 1.

The basic provisions of the preparation of occupational disease diagnostic standards, "the requirements of the text and structure changes. In the diagnostic system with GBZ 73, GBZ

74, GBZ 76, GBZ 78 phase convergence, so that the diagnosis is more clear, reasonable and easy to use.

Appendix A to this standard is an informative appendix.

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

This standard by the Sichuan University, West China Occupational Hospital, Jinling Petrochemical Company Nanjing Refinery Hospital (Occupational Disease Prevention and Control Center) negative to draft. Participate in the drafting of the units are Shanghai Yangpu District Central Hospital, Urumqi Petrochemical Plant Hospital, Shantou City occupational disease Prevention and control, Huludao City Jinxi Petrochemical Plant Hospital, Anqing Petrochemical Plant Health Department of occupational disease prevention and control, Maoming Petrochemical Company hospital.

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

Diagnostic criteria for occupational acute hydrogen sulfide poisoning Occupational acute hydrogen sulfide poisoning is in the professional activities, short-term inhalation of a large number of hydrogen sulfide gas caused by the central Nervous system, respiratory system-based multiple organ damage to systemic disease.

1 Scope

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

This standard applies to the diagnosis and treatment of occupational acute hydrogen sulfide poisoning, the diagnosis of non-occupational acute hydrogen sulfide poisoning and Processing can also refer to the implementation.

2 Reference standard

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.

Diagnostic criteria for occupational toxic liver disease GBZ 54 Occupational chemical eye burns diagnostic criteria GBZ 73 Occupational acute chemicals - Criteria for the diagnosis of toxic respiratory diseases Diagnostic criteria for occupational acute chemical poisoning heart disease GBZ 76 Occupational Acute Chemical Poisoning Nervous System Disease Diagnostic Criteria Diagnostic criteria for occupational exogenous death in GBZ 78 Identification of Occupational Injury and Occupational Disease Disability in Staff and

Workers GB/T 16180

3 Diagnostic principles

According to the short-term inhalation of a large number of occupational exposure history of hydrogen sulfide, the central nervous system and respiratory system-based Clinical manifestations, reference to the scene of labor hygiene investigation, comprehensive analysis, and exclude other similar manifestations of the disease, can be diagnosed.

4 Contact reaction

Exposure to hydrogen sulfide after the eye tingling, shame out, tears, conjunctival hyperemia, pharyngeal burning sensation, cough and other eyes and upper respiratory tract Stimulate the performance, or headache, dizziness, fatigue, nausea and other neurological symptoms, from the contact after a short period of time to disappear.

5.1 Mild poisoning

One of the following.

- a) obvious headache, dizziness, fatigue and other symptoms and mild to moderate disturbance of consciousness;
- b) acute tracheobronchitis or bronchial inflammation.

5.2 Moderate poisoning

One of the following.

- a) Consciousness disorder is manifested as shallow to moderate coma;
- b) acute bronchial pneumonia.

5.3 Severe poisoning

One of the following.

- a) the degree of disturbance of consciousness in a deep coma or a state of plants;
- b) Pulmonary edema;
- c) sudden death;
- d) multiple organ failure.

6.1 Principles of treatment

6.1.1 quickly out of the scene, oxygen, keep quiet, bed rest, close observation, pay attention to changes in condition.

6.1.2

rescue, treatment principles to symptomatic and supportive therapy-based, active prevention and treatment of cerebral edema, pulmonary edema, early, adequate, short the use of adrenal glucocorticoid. Moderate, severe poisoning, conditional arrangements should be arranged as soon as possible hyperbaric oxygen therapy.

6.1.3

on the breathing, cardiac arrest, immediate heart, lung resuscitation, to be breathing, heartbeat recovery, conditional as soon as possible Oxygen therapy, and positive symptomatic, supportive treatment.

6.2 Other treatments

Acute light and moderate poisoning can be restored after the original work, severe poisoning after recovery should be transferred from the original job.

Need to carry out the ability to work according to GB/T 16180 identification.

7 Correctly use the instructions in this standard

See Appendix A (informative).

Appendix A

(Informative)

Correctly use the instructions in this standard A.1 This standard applies to the diagnosis of acute poisoning caused by exposure to hydrogen sulfide gas and should be noted in relation to carbon monoxide, cyanide and cyanide Compounds, carbon dioxide, acute poisoning caused by inert gases, acute central nervous system infections, and cerebrovascular effects External identification.

A.2 cause the concentration of acute hydrogen sulfide poisoning if the inability to determine, as long as the patient's environment in the production process can produce hydrogen sulfide, then measured hydrogen sulfide gas, or the patient was smelled when the smell of eggs, then the symptoms of the nervous system, eye and respiratory mucosal irritation symptoms, to consider the possibility of acute hydrogen sulfide poisoning.

A.3 classification of acute hydrogen sulfide poisoning with the main target organ central nervous system and the clinical manifestations of the respiratory system as the main According to the classification of consciousness disorder reference GBZ 76. Because