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NATIONAL STANDARD OF THE PEOPLE'S REPUBLIC OF CHINA

GB 16348-2010

Replacing GB 16348-1996

Radiological protection standards for the examinee in medical X-ray diagnosis

医用X射线诊断受检者放射卫生防护标准

Issued on: January 14, 2011 **Implemented on: June 1, 2011**

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Standardization Administration of China

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Foreword

3.4 of this standard are recommended, the rest are mandatory. This standard replaces GB 16348-1996 "X-ray diagnosis of the subject Radiological protection standards", GB 16349-1996 "women of childbearing age And X-ray examination Radiological protection standards for pregnant women ", GB 16350-1996" Children X-ray diagnosis Radiological protection standards. " This standard compared with the original single standard main changes are as follows:

--- According to GB/T 1.1-2000 standard text format has been modified;

--- This standard GB 16348-1996, GB 16349-1996, GB 16350-1996, WS/T 75-1996 "Medical X-ray The rational application of the principles of diagnosis "and other four criteria consolidated;

--- With GB 18871-2002 "Ionizing Radiation Protection and Safety of Radiation Sources basic standards" as the basis, the GB 16348 ~ GB 16350-1996 standard content integration, changes and additions, and WS/T 75 is attached to modify this standard Record A;

--- Proposed according to GB 18871 Medical X-ray dose guidance levels subject, emphasizing the responsibility of the licensee and the like;

--- Increasing the quality of X-ray diagnostic work assurance program requirements, and the quality control of diagnostic equipment testing requirements;

--- Emphasize the purposes of such checks to pregnant women before the X-ray examination of pregnant women and pregnant women subject to the right to know his or her immediate family or After signing consent before implementation. The Standard Annexes A and B are normative appendix. This standard is proposed and administered by the People's Republic of China Ministry of Health. This standard by the People's Republic of China

Ministry of Health is responsible for interpretation. This standard was drafted. Jiangsu Provincial Disease Prevention and Control Center. The main drafters of this standard. Yue Ximing, rather than music. This standard replaces the previous version of the standard release of case.

--- GB 16348-1996;

--- GB 16349-1996;

--- GB 16350-1996. Medical X-ray diagnosis of the subject Radiological protection standards

1 Scope

GB 16348 protects the patient rather than the operator: it sets the principles and the basic requirements for limiting the dose a person receives when X-rayed for diagnosis. Clause 5 makes the justification assessment a precondition for every examination - non-X-ray methods considered first, no examination without a proper indication, fluoroscopy of the chest excluded from group screening, and mobile equipment only where a fixed installation cannot be used. Clause 6 then applies the optimization principle: quality control testing of the equipment, radiography preferred over direct fluoroscopy, the beam collimated to a rectangular field aligned to the receiver, shielding of the eyes, thyroid, breast, active bone marrow and gonads outside the field, and the high-voltage, low-current, thick-filtration technique. Three clauses carry particular requirements: for children, down to the lead equivalent of the shields and the fixation devices that avoid an adult holding the child; for women of childbearing age, including the ten-day rule after menstruation and the restrictions on IUD and breast examinations; and for pregnant women, where the examination requires an explanation of the risk and a signed consent, and where elective abdominal and pelvic examinations are excluded between the eighth and fifteenth week. Annex A carries the reasonable-application principles inherited from WS/T 75, examination by examination; Annex B the dose guidance levels drawn from GB 18871. It consolidates GB 16348-1996, GB 16349-1996 and GB 16350-1996 into one standard. Issued on 14 January 2011 by the Ministry of Health and SAC, in force since 1 June 2011. This page is published from the official record of the standard and from its published table of contents. The full clause text, the tables and the dose guidance levels are in the document itself, which is delivered complete in English translation.

This standard specifies the protection principles and basic requirements for X-ray diagnosis of the subject, as well as children, women of childbearing age, pregnant women special Claim. This standard applies to medical X-ray diagnostic check.

2 Normative references

The following documents contain provisions which, through reference in this standard and

become the standard terms. For dated references, subsequent Amendments (not including errata content) or revisions do not apply to this standard, however, encourage the parties to the agreement are based on research Whether the latest versions of these documents. For undated reference documents, the latest versions apply to this standard.

GB 18871-2002 ionizing radiation protection and safety of radiation sources basic standards GB Z130 medical diagnostic X-ray protection standards

3 General

3.1 X-ray diagnostic examinations in medical exposures should be the subject suffered through legitimacy judgment, have a good indication and avoid unnecessary Repeat the inspection. X-ray diagnostic examinations of women and children should be careful to judge.

3.2 reasonable application of medical X-ray diagnostic examination of the principles in Appendix A.

3.3 subjects suffered medical exposures should follow the principle of optimization of protection and safety, to accept the dose can be maintained at the lowest reasonably achievable Level.

3.4 dose guidance levels for medical diagnostic X-ray examination of Appendix B.

3.5 should be equipped with the performance of qualified medical diagnostic X-ray machine and the appropriate protective equipment, auxiliary equipment, to carry out a reasonable set of diagnostic X-ray examination Workplace and protection facilities, and meet GB Z130 and other relevant standards.

3.6 protection should be equipped with a variety of performance and quality standards of protective equipment.

3.7 should develop quality assurance program for medical exposures, in order to prevent equipment failures and human errors. The quality assurance program should be consistent with GB 18871- 2002

7.3.3.2 requirements.

4 Responsibility

4.1 medical institutions should be responsible for protection and safety of the subject, the subject shall provide effective, safe diagnostic check. Related Practice Physicians and medical technicians, radiation protection responsible person, qualified experts, medical irradiation apparatus and protective equipment suppliers, also deal with the subject of prevention Support and security were to assume corresponding responsibilities.

4.2 Only certified physicians with appropriate qualifications (including practicing physician

assistant township hospitals, the same below) to the X-ray diagnostic check issued Check requisitions, and to ensure that the subject of protection and safety bear the primary task.

4.3 health care institutions should develop practitioners and medical technicians, persons responsible for radiation protection training program to be subject to appropriate radiation Radiation protection training and acquire knowledge workers permit. Medical technicians should obtain appropriate professional skills and qualifications to assume the tasks assigned.

5 Legitimacy judgment

5.1 Application of X-ray inspection shall be subject to the legitimacy of judgment. Practitioners should be based on history, physical examination, laboratory tests and other clinical judgment of the patient is No need to use X-ray inspection, have a good indication.

5.2 should be considered the preferred non-X-ray inspection method, based on clinical indications confirm the X-ray inspection is the most appropriate way to check party You may apply for an X-ray examination.

5.3 X-ray inspection group should be based on the prevalence of the disease is expected to check the effectiveness and long-term effects of X-ray inspection and other risk Conduct legitimacy judgment to determine whether the group X-ray inspection can be worthwhile and scope of.

5.4 to medical care for the purpose of group X-ray examination should be directed at different groups of actual, proper control of the number of X-ray inspection, location and frequency. The chest should not be listed as a group examination will review the project.

5.5 should be particularly strengthened women of childbearing age and pregnant women, infants X-ray examination of the legitimacy of the judgment.

5.6 can not be used when really necessary fixed equipment and X-ray inspection allows the use of mobile devices. Use of mobile devices in the ward X-ray inspection within do, you should take protective measures to reduce the radiation on the surrounding of the patient, it does not allow a useful wiring harness toward other patients.

5.7 pairs do not meet the legitimacy of the judgment should not be subjected to X-ray inspection.

6 Optimization of protection

6.1 variety of diagnostic X-ray inspection equipment should adopt quality control testing (including acceptance testing, state testing and stability testing), consistent quality Before it can use the amount of control requirements. Quality control testing should be carried out in accordance with the relevant standards and requirements.