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NATIONAL STANDARD OF THE PEOPLE'S REPUBLIC OF CHINA

GB/T 46659-2025

Control of water-borne iodine excess areas and iodine excess endemic areas

水源性高碘地区和高碘病区控制

Issued on: October 31, 2025 **Implemented on: May 1, 2026**

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Standardization Administration of the PRC

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Foreword

This document complies with the provisions of GB/T 1.1-2020 "Standardization Work Guidelines Part

1.Structure and Drafting Rules of Standardization Documents". Drafting. Please note that some content in this document may involve patents. The issuing organization of this document assumes no responsibility for identifying patents. This document was proposed and is under the jurisdiction of the National Center for Disease Control and Prevention. This document was drafted by: Shanxi Provincial Institute of Endemic Disease Control and Prevention, Chinese Center for Disease Control and Prevention, and Anhui Provincial Center for Disease Control and Prevention. Prevention and Control Center. The main drafters of this document are. Jia Qingzhen, Zhang Xiangdong, Liu Peng, Li Weidong, Meng Fangang, Yu Chen, and Wang Yongping. Control of waterborne high iodine areas and high iodine disease areas

1 Scope

GB/T 46659-2025 is the Chinese national standard covering the opposite of the iodine deficiency problem - areas where the groundwater carries too much iodine, the surveying that identifies them, the switch to non-iodised salt and to alternative water sources, and the criteria for declaring the area controlled. First edition, under the National Disease Control and Prevention Administration. In force from 1 May 2026. Issued on 31 October 2025, it has been in force since 1 May 2026.

This document specifies control indicators for water-borne high-iodine areas and high-iodine disease areas, and describes sampling, testing, and inspection methods. This document applies to the evaluation, assessment, and judgment of the control status of water-source high-iodine areas and high-iodine disease areas.

2 Normative references

The contents of the following documents, through normative references within the text, constitute essential provisions of this document. Dated citations are not included. For references to documents, only the version corresponding to that date applies to this document; for undated references, the latest version (including all amendments) applies. This document.

GB 5749 Standard for Drinking Water Quality

GB/T 5750.2 Standard Examination Methods for Drinking Water - Part

3 Terms and Definitions

The terms and definitions defined in GB/T 19380 and GB 5749, as well as the following terms and definitions, apply to this document.

3.1 In areas with high iodine levels in water sources or areas with high iodine levels causing illness, the iodine content in residents' drinking water can be reduced by constructing water supply projects or configuring related facilities.

4 Control Indicators

4.1 General Requirements According to GB/T 19380, water-source high-iodine areas and high-iodine disease areas must meet condition

4.3 to be deemed as having achieved control. Control level.

4.2 Areas with high iodine levels in water sources (excluding disease-affected areas) Taking administrative villages (communities) as units, after the water improvement and iodine reduction, the median iodine content in the drinking water of residents is <=100μg/L, and the iodine content in the drinking water of children aged 8 to 10 years is within the range of 10 μg/L. The median urinary iodine level in children aged 1-6 years is >=100 μg/L and < 300 μg/L.

4.3 Waterborne iodine-contaminated areas Taking administrative villages (communities) as units, after the water improvement and iodine reduction, the median iodine content in the drinking water of residents is <=100μg/L, and the iodine content in the drinking water of children aged 8 to 10 years is within the range of 10 μg/L. The median urinary iodine level in children aged 1-1 years was >=100 μg/L and < 300 μg/L, and the rate of goiter in children aged 8-10 years was < 5%.

5 Inorganic Non-metallic Indicators

GB/T 19380 Delineation of Waterborne High Iodine Areas and Iodine-Disease Areas WS/T 107.1 Determination of iodine in urine - Part

1.Arsenic-cerium catalytic spectrophotometric method WS/T 107.2 Determination of iodine

in urine - Part

2.Inductively coupled plasma mass spectrometry WS/T 10027 Diagnosis of Endemic Goiter