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NATIONAL STANDARD OF THE PEOPLE'S REPUBLIC OF CHINA

GB 16883-2022

Dertermination for natural plague foci and plague epizootics

鼠疫自然疫源地及动物鼠疫流行判定

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Foreword

This document is in accordance with the provisions of GB/T 1.1-2020 "Guidelines for Standardization Work Part

1.Structure and Drafting Rules of Standardization Documents" drafted. This document replaces GB 16883-1997 "Standards for Determination of Natural Foci of Plague and Animal Plague Epidemic", which is consistent with GB 16883-1997 In addition to structural adjustments and editorial changes, the main technical changes are as follows:

--- Changed the terms and definitions of "natural plague foci", "main host" and "main vector" (see 3.1,

3.2 and 3.3,.1997 edition 3.1,

--- Added the terms and definitions of "type of natural plague foci" and "animal plague epidemic" (see

---Increased that the detection of Yersinia pestis-specific gene and specific antigen in the same specimen is double positive, which can determine animal plague an ongoing epidemic (see 5.1.1);

--- Added the assessment of animal plague epidemic intensity (see 5.2);

--- Changed the collection method of test specimens in Appendix A and part of the technical content of the bacteriological test method of plague in Appendix B (see Appendix A and Appendix B, Appendix A and Appendix B of the.1997 edition);

--- Added the type of natural foci of plague in China (see Appendix C). Please note that some content of this document may be patented. The issuing agency of this document assumes no responsibility for identifying patents. This document is proposed and managed by the National Health Commission of the People's Republic of China. The previous versions of this document and its superseded documents are as follows:

---First published in.1997 as GB 16883-1997;

---This is the first revision. Determination of the natural foci of plague and the prevalence of

animal plague

1 Scope

China's mandatory national standard for determining natural plague foci and plague epizootics. Plague has never been eradicated: it persists in wild rodent populations across the grasslands and plateaus of western and northern China, circulating between marmots, gerbils and their fleas without any human involvement until someone handles an infected animal. Those persistent reservoirs are the natural foci, and mapping and monitoring them is the whole basis of prevention, because human cases are always preceded by an epizootic in the rodents. The standard fixes the criteria by which an area is declared a natural focus and by which an epizootic is judged to be under way - the rodent and flea surveys, the bacteriological and serological confirmation, the indicator species, and the thresholds that trigger a response. It is the technical basis of a surveillance system that has kept a disease with a fatal reputation to a handful of cases a year.

This document specifies the newly discovered natural foci of plague in China and the determination of the prevalence of animal plague. This document is applicable to China's determination of natural plague foci, animal plague epidemic and animal plague epidemic intensity assessment.

2 Normative references

The contents of the following documents constitute essential provisions of this document through normative references in the text. Among them, dated citations documents, only the version corresponding to that date applies to this document; for undated references, the latest edition (including all amendments) applies to this document.

WS279-2008 Diagnostic criteria for plague

3 Terms and Definitions

The following terms and definitions apply to this document.

3.1 natural plague foci Maintenance of specific ecosystems where plague occurs in nature.

Note. Including Yersinia pestis, rodents infected with plague, arthropods that can transmit plague, and the geographical environment suitable for their survival.

3.2 main host principalreservoir Rodents capable of sustaining the long-term presence of natural plague foci.

Note. Plague can circulate in this animal population as a disease and can spread to other animals or humans.

3.3 main medium principalvector It has strong transmission ability for Yersinia pestis, can

cause and maintain the plague epidemic of the main host, and has the ability to initiate the natural foci of plague. Arthropod to act.

Note. In the natural foci of plague in China are fleas that parasitize the main host and can transmit plague.

3.4 Based on the biological characteristics, genetic characteristics, main hosts, main vectors and geographical environment characteristics of natural plague foci of Yersinia pestis The type of division for the main logo.

3.5 Plague epizootics Yersinia pestis causes infection, morbidity or death in host animals and spreads between host animals.

Note. Animal plague epidemics can lead to the occurrence of human plague.

4 Determination of the natural foci of plague

4.1 If Yersinia pestis is detected in local wild rodents or their parasitic media specimens, the source area of the specimens can be determined to be rodents.