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**INDUSTRY STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

WS/T 687-2020

**Operating procedures for vector control
(English Translation)**

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Foreword

This standard was drafted in accordance with the rules given in GB/T 1.1-2009.

Drafting organizations of this standard. Beijing Municipal Center for Disease Control and Prevention, Guangdong Provincial Center for Disease Control and Prevention, Nanchang City Center for Disease Control and Prevention.

1 Scope

This standard specifies the principles and operating procedures for the prevention and control of vector organisms in urban residential areas.

This standard applies to the prevention and control of cockroaches, flies, mosquitoes, and rodents, the main vector organisms in urban residential areas.

2 Normative references

The following documents are indispensable for the application of this document. For dated reference documents, only the dated version applies to this document.

For undated references, the latest version (including all amendments) applies to this document.

GB/T 23795 Monitoring method for vector density of cockroaches GB/T 23796 Vector density monitoring method flies GB/T 23797 Vector density monitoring method for

mosquitoes GB/T 23798 Vector density monitoring method Rodent GB/T 27770 Vector density control level rodents GB/T 27771 Vector density control level mosquitoes GB/T 27772 Vector density control level flies GB/T 27773 Vector density control level cockroach GB/T 31714 Vector Biochemical Control Technology Guide Space Spray GB/T 31715 Technical Guidelines for Vector Biochemical Control GB/T 31721-2015 Vector control terminology and classification

3 Terms and definitions

The following terms and definitions apply to this document.

Vector

Organisms that can transmit pathogenic organisms from the source of infection or the environment to humans through biological and/or mechanical means.

Note 1: The vector organisms involved in this standard are mosquitoes, flies, cockroaches and rodents.

Note 2: Rewrite GB/T 31721-2015, definition 2.1.1.

Residential area

Residential district, the city is enclosed by residential district-level roads or natural boundaries, so that the basic living activities of residents do not cross the main intersection of the city.

The principle of access is to provide public services corresponding to the size of the population that meet the basic material and cultural needs of residents in the area Facilities for living and living in concentrated areas.

Rodent-proof structure or facilities A device that can prevent rodents from entering indoors or related places.

[GB/T 31721-2015, definition 4.4.3] 3.4 Housefly-proof facilities A device that can prevent flies from entering the room or touching food. Such as screen doors, screen windows, air curtain machines, door curtains, screen covers, etc.

[GB/T 31721-2015, definition 4.4.2] 3.5 Mosquito-proof facilities A device to prevent mosquitoes from entering the environment where people live or move, and to prevent mosquitoes from breeding and breeding and people from being bitten or harassed.

[GB/T 31721-2015, definition 4.4.1]

4 Principles of Prevention

The prevention and control of vector organisms in urban residential areas should be combined with the characteristics of residential areas, based on safety and environmental

protection, ensuring the safety of personnel and pets, and highlight environmental protection.

Environmental improvement, focusing on removing mosquitoes, flies, cockroaches, and rodents inhabiting and breeding places, establishing anti-mosquito and anti-rodent facilities, and implementing chemical for prevention and control, select safe and maneuverable methods to effectively control the vector hazards in residential areas.

5.1.1 Investigation method

5.1.1.1

The indoor cockroach density survey method is based on the visual inspection method and stick trap method of GB/T 23795.

5.1.1.2

The outdoor fly density survey method is based on GB/T 23796. The adult fly adopts the cage trap method, and the fly larva adopts the larval visual method.

5.1.1.3

The indoor and outdoor mosquito density survey method is in accordance with GB/T 23797. For mosquito larvae (pupa), small stagnant water adopts path method or larva sucking in the pipe method, large water bodies adopt the scoop method; adult mosquitoes adopt the trapping method or the carbon dioxide trap method.

5.1.1.4

The indoor and outdoor rat density survey method shall be carried out according to the rat trace method of GB/T 23798.

5.1.2.1 Cockroach

The survey content and indicators are as follows.

--Inquire about the infringement of cockroaches in residential areas, including the types of cockroaches, the time of infringement, the scope of infringement, the degree of harm, and previous medications Situation etc.;

--Inspect indoor kitchens, bathrooms and other areas in residential areas, and observe the holes, holes, and seams in kitchen cabinets, stoves, sinks, etc. by visual inspection the number of cockroach and cockroach traces; or according to GB/T 23795, use the stick trap method to investigate the cockroach density.

Record the investigation content of cockroach species, infringement range, density, etc., and fill in the investigation results into the questionnaire (see Table A.1 in Appendix A) and Table A.2), refer to GB/T 23795 to calculate the infestation rate, density or density index, and the positive rate of cockroach traces (seizure rate).

Note: positive rate of cockroach traces = number of positive households/number of inspected households

5.1.2.2 Flies

In the residential area, use cage trap method to investigate the damage of adult flies and record the total number of flies caught; use larva visual inspection method to check the breeding of flies larvae Habitat; fill in the survey results into the survey form (see Table A.3 in Appendix A), and calculate adult fly density and fly larvae breeding according to GB/T 23796 Ground positive rate; at the same time, record whether there are scattered garbage, whether there are closed storage containers that match the amount of garbage generated, and the situation of Nissan and Nissan, Calculate the pass rate of closed garbage containers.

5.1.2.3 Mosquitoes

The survey content and indicators are as follows.

- Large and medium-sized water bodies in residential areas, using the larval spoon catch method to investigate the density of mosquito larvae (pupa). Record the number of positive spoons and collected mosquito larvae (Pupa) number, of positive water bodies breeding mosquito larvae;

- Use the path method or the larval straw method to investigate the density of mosquito larvae (pupa) in the outdoor small water in residential areas. Record and monitor walking distance, the number of small stagnant water or stagnant water containers that breed mosquito larvae, and the number of inspection containers;

- The adult mosquito density survey adopts the trapping method or the carbon dioxide trap method. Record the time of mosquito trapping, the number of female mosquitoes trapped, and the amount of mosquito trapping Number of people or lights.

Fill in the survey results into the survey form (see Table A.4 and Table A.5 in Appendix A), and refer to GB/T 23797 to calculate the scoop index, Path index or container index to calculate the landing index or adult mosquito density.

5.1.2.4 Rodents

Check the number of rat tracks or positive rooms in residential areas, basements, elevator shafts, underground tube wells and garbage storage points, and record the inspection distance Leave and check the number of rooms and fill in the questionnaire (see Table A.6 in Appendix A). Refer to GB/T 23798 to calculate the positive rate of rat tracks or path index.