

2.3 DISINSECTION OF AIRCRAFT

The SARPs of Annex 9, Chapter 2, section D: Disinsection of aircraft

2.3.1 The increased speed of aircraft and the consequent reduction in transit time, coupled with the development of international traffic, have brought about a heightened risk of conveying insect vectors from one country to another, even from one continent to another.

2.3.2 States are concerned about the conveyance by aircraft, ships, trains, road vehicles and cargo containers of new insect vectors or pest species to their territories, due to the potentially disastrous effects on their national agriculture. In an attempt to prevent the introduction of new pest species which pose a threat to human, animal and plant health, or to the environment, States may take protective action in their national import programmes. Aircraft disinsection is one such measure.

2.3.3 Over the years, there have been concerns about disinsecting procedures following incidents in which passengers and crews have reported allergic reactions, which they attributed to the aerosol spraying of aircraft. The Eleventh Session of the Facilitation Division (FAL/11) considered two different positions on disinsection of aircraft:

- a) States concerned about the possible effect disinsection has on passengers and crews; and
- b) States which continue requesting disinsection to protect public health, the environment, animals and plants.

2.3.4 In 1984, the World Health Organization (WHO) recognized that the conventional methods of disinsection had, in some cases, apparently caused allergic and other unfavourable reactions in passengers, or at least might have acted as triggers for allergic reactions by some well-known allergens and/or haptens. In order to overcome these difficulties, a new disinsecting method based on a residual spray of long effectiveness, permethrin, was developed in New Zealand and approved by WHO. This residual method of disinsecting decreases the risk of adverse effects in persons susceptible to components of insecticidal aerosols.

2.3.5 The FAL Division noted that although the existing methods, procedures and substances used in aircraft disinsection had been thoroughly studied and found safe by WHO, in some countries routine spraying had been discontinued because of concern for the health of passengers and crews and the belief that aircraft spraying has not played a significant role in disease control.

2.3.6 It is essential to meet the requirements for the protection of public health, the environment and agriculture, and at the same time care for the comfort and well-being of passengers and crew.

2.3.7 *Disinsection practices*

Aircraft disinsection can be performed in several ways:

- a) by residual treatment;

b) by space spraying with or without passengers present; and

c) by combinations of both.

Disinsection methods presently used by airlines may be done by spraying before or during the flight using aerosols and residual treatment.

Types of disinsection procedures

2.3.8 “Blocks away” disinsection. This procedure takes place after passengers have boarded, and the doors have been closed, and prior to take-off. The aircraft is treated by crew members walking through the cabins discharging approved single shot aerosols at the prescribed dosage. Cargo holds and the flight deck are sprayed prior to departure and the flight deck prior to boarding by the crew.

2.3.9 Pre-flight and top-of-descent spraying. This procedure is similar to “blocks away” except that the aircraft cabin is sprayed on the ground prior to passengers’ boarding, using an aerosol containing a residual insecticide. The timing of this spray allows lockers to be open and causes minimum inconvenience to passengers. Pre-flight spraying is followed by a further in-flight spray carried out at “top-of-descent” as the aircraft starts its descent to the arrival airport.

2.3.10 Residual treatment. Using this procedure, the internal surfaces, excluding food preparation areas, of the aircraft are regularly sprayed with a residual insecticide to ensure that if an insect gains access to the aircraft and lands on a surface it will receive an effective dose of insecticide. The residual disinsection treatment provides the most assurance against adverse health reactions, remains efficacious for eight weeks, does not require passengers or crew to be exposed to aerosol sprays, and also requires less work by aircraft cabin crew. Nevertheless, it is recognized that not all airlines would employ this method for reasons associated with airline operations and, to a lesser degree, cost considerations. It is for this reason that airlines should be given several options for achieving effective disinsection.

2.3.11 ICAO Standards do not require any State to conduct cabin spraying on an aircraft while passengers are present, nor to perform any other kind of disinsecting. Contracting States requiring disinsection are to comply with the recommendations of the World Health Organization (WHO). (Standard 2.24)

2.3.12 When disinsection has been performed in accordance with procedures recommended by the World Health Organization, the Contracting State concerned shall accept a pertinent certification on the General Declaration as provided for in Annex 9, Appendix 1 (reproduced at the end of this chapter) or, in the case of residual disinsection, the Certificate of Residual Disinsection set forth in Annex 9, Appendix 4 (also reproduced at the end of this chapter).