

# AIRCRAFT DISINSECTION POLICY

## BACKGROUND

The World Health Organization (WHO) defines 'disinsection' as the procedure whereby health measures are taken to control or kill the insect vectors of human diseases present in baggage, cargo, containers, conveyances, goods and postal parcels.

There are three main insect vectors of concern, all mosquitoes:

- 1. *Aedes aegypti* and other species: vector for yellow fever, chikungunya and the dengue group of viruses.
- 2. *Culex pipiens*: vector for West Nile virus, Japanese encephalitis and the meningitis group of viruses;
- 3. Anopheles, various species: vector for malaria.

Both *Aedes aegypti* and *Culex pipiens* are already established on St Helena so the arrival of either a single infected mosquito or infected person could potentially lead to an epidemic.

In addition to these specific mosquito species of public health concern, aircraft can also carry flying and crawling insects, other mosquito species and spiders which could negatively impact St Helena's rich endemic biodiversity, agriculture and the environment.

#### INTERNATIONAL REGULATIONS

The process of disinsection is required under the International Health Regulations 2005 (IHR 2005) of the World Health Organization (WHO) on flights to and from certain destinations to prevent the spread of infectious and contagious diseases carried by insect vectors. The IHR (2005) includes the following provisions:

Annex 5 Specific measures for vector-borne diseases:

2. Every conveyance leaving a point of entry situated in an area where vector control is recommended should be disinsected and kept free of vectors. When there are methods and materials advised by the Organization for these procedures, these should be employed. The presence of vectors on board conveyances and the control measures used to eradicate them shall be included:

(a) in the case of aircraft, in the Health Part of the Aircraft General Declaration, unless this part of the Declaration is waived by the competent authority at the airport of arrival;

3. States Parties should accept disinsecting, deratting and other control measures for conveyances applied by other States if methods and materials advised by the Organization have been applied.

The Convention on International Civil Aviation (also known as the Chicago Convention) provides for disinsection or aircraft under Chapter 2 of Annex 9, Disinsection of aircraft:

2.22 Disinsection of aircraft cabins and flights decks with an aerosol while passengers and crews are on board, to same-aircraft operations originating in, or operating via, territories that they consider to pose a threat to their public health, agriculture or environment.

### LOCAL CONTEXT

This policy supports the St Helena Sustainable Development Plan, 2014 - 2017, National Goal 1: "a vibrant economy providing opportunities for all to participate", through contributing to the Health Outcome "life expectancy is increased and healthy lifestyles are promoted". It also supports the Sustainable Economic Development Plan 2012/2013 - 2021/2022 for "A Tourism Driven Economy", as St Helena would be less attractive to tourism in the event of vector-borne epidemics affecting public health.

The Aircraft Disinsection Policy also supports the National Biosecurity Policy "Biosecurity St Helena" Overarching Outcome 1 "Biosecurity risks to St Helena's environment, agriculture, amenity, public health and well-being, including safety, are effectively managed".

Disinsection is required under Aviation Ordinance 2015, Public health and environment Art. 10. (1) The Governor in Council shall make regulations to ensure compliance with Chapter 2 of Annex 9: Facilitation to the Chicago Convention on aircraft disinfection and aircraft disinsection.

### COUNTRY SCOPE OF APPLICABILITY

This policy applies to all inbound flights regardless of origin or status.

#### DISINSECTION OF AIRCRAFT INTO ST HELENA ISLAND

WHO recommends that aircraft disinsection will minimise the risks of vectors and diseases spread by mosquitoes which act as transmitters or vectors of pathogens or parasites that are responsible for spreading a number of human pathogenic organisms. This policy applies to all incoming aircraft, including scheduled flights, charter flights, medevac flights and private jets.

Aircraft disinsection must be carried out on all incoming flights. Until such time as evidence is produced of disinsection having taken place, neither passengers, crew or cargo will be allowed to disembark.

The disinsection method used must be in accordance with WHO recommendations. Routine residual treatment for both hold and cabin is strongly recommended.

	Description
Residual	Aircraft cabin is sprayed on the ground with a residual insecticide before passenger's board the aircraft. It is done at regular intervals based on effectiveness (not less than 8 weeks). Spot applications are made to surfaces that are frequently cleaned.
Blocks-away	Aircraft cabin is sprayed after doors are locked following passenger embarkation but before take-off. Holds are sprayed prior to departure.
Pre-flight and top-of descent	Aircraft is sprayed on the ground before passenger's board. This allows overhead lockers, wardrobes and toilets to be opened and properly sprayed with a spray containing permethrin (residual contact spray). Further in-flight treatment with a quick-acting knockdown spray is also applied as the aircraft starts its descent to the arrival airport.

The World Health Organisation (2005) recommends any of the following three disinsection methods:

In the event that disinsection has not been completed to WHO standards or documented correctly, St Helena reserves the right to disinsect upon arrival. A fee to cover the costs of providing this service will be charged and the following method will apply:

	Description
On-Arrival	Aircraft cabin is sprayed on the ground on arrival before passengers disembark.

## PESTICIDES TO BE USED

Rules established by the International Civil Aviation Organization (ICAO) require that disinsection does not injure or cause discomfort to passengers or crew. These rules permit the use of certain insecticides, which have the approval of and are recommended by the WHO based on their effectiveness and safety. Pesticides used for aircraft disinsection in the UK must be approved by the Health and Safety Executive under the Control of Pesticides Regulations 1986.

It is the airlines responsibility to ensure the aerosol products used meet all aviation and aircraft manufacturers technical and safety requirements, the WHO and ICAO (International Civil Aviation Organization) guidelines.

All aerosol cans must be clearly labelled (in English) with a list of all active ingredients used. Alternatively, they must be accompanied with an English version of the material safety data sheet for each product used.

Any exhausted or partly exhausted can/s used must travel onboard the aircraft and will be subject to verification checks on-arrival. If treatment is carried out by an independent company the airline operator is responsible for ensuring that a certificate detailing the cabin and hold treatment is completed and that the exhausted or partly used cans remain onboard until the intended destination is reached. A copy of the onboard certificate and the exhausted or partly used cans must be made available by cabin staff on request. Hold cans should remain in the hold for collection by Port Health.

## POLICY REVIEW

This policy shall be reviewed annually and whenever advice or requirements from the WHO change, or when an incident occurs that exposes weaknesses in the Policy.

Approved By: Date Approved: Public Health Committee 9 November 2015