

Risk of international spread of vector-borne diseases via air travel – the role of aircraft disinsection under the International Health Regulations (2005)

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Geneva, 5 July 2018

Requirements under the IHR (2005) – Annex 5 (1/2)

1. "WHO shall publish, on a regular basis, a list of areas where disinsection or other vector control measures are recommended for conveyances arriving from these areas. [...]"
2. "Every conveyance leaving a point of entry situated in an area where vector control is recommended should be disinfected and kept free of vectors. [...]"
3. States Parties should accept disinsection, deratting and other control measures for conveyances applied by other States if methods and materials advised by the Organization have been applied.



Requirements under the IHR (2005) – Annex 5 (2/2)

4. States Parties shall establish programmes to control vectors that may transport an infectious agent that constitutes a public health risk to a minimum distance of 400 metres from those areas of the point of entry facilities that are used for operations involving travellers, conveyances, containers, cargo, and postal parcels, with extension of the minimum distance of vectors with a greater range are present.

8. A State Party may apply vector control measures to a conveyance arriving from an area affected by a vector-borne disease if the vectors for the foregoing disease are present in it territory.



Outcomes of the WHO meeting in July 2018

- WHO position paper on the application of Annex 5 requirements - *in progress*
- Systematic review on effectiveness of disinsection in reducing the international spread of vector-borne diseases – *in progress* (abstract accepted for presentation at CISTM16)
- Development of a vector map for *Aedes albopictus* and *Aedes aegypti*, as well as for *Anopheles* species – *on hold (funding issues)*
- Project to gather data on the numbers and types of mosquitoes on airbridges and in aircraft – *in progress*
- WHO's list of areas (not airports) for the application of vector control measures to conveyances will be informed by the planned maps, as well as by the airport vector control registry and the volume of travel.
- ICAO decision tool is a good instrument – discussions ongoing to develop a European decision-making tool



Systematic review on aircraft disinsection

- Developed by the University of Zurich WHO Collaborating Centre on Travel Health
- Submitted and accepted for poster presentation at the 16th Conference of the International Society for Travel Medicine, June 2016
- Preliminary findings:
 - disease vectors are carried on international flights and are a threat particularly to island populations and some airport hubs.
 - certain spraying methods were identified as being particularly effective against vectors.
 - limited evidence about a possible association between flight crew exposure to insecticide spraying and health impact.
 - more research needed to better document the benefits and harms of insecticide spraying in aircraft.

