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OF VECTORS AND RESERVOIRS OF DISEASES

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THE ROLE OF PORT AUTHORITIES IN CONTROL  
OF VECTORS AND RESERVOIRS OF DISEASES

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The ever-increasing volume of international traffic by land, sea and air, the constantly increasing speed and range of aircraft, and the construction of trans- and intercontinental roads and rail roads, all facilitate the importation of vectors from infected areas to the areas of the world where there is possibility of establishment of transmission. Therefore special attention is given to the insect and reservoirs of the disease and to quarantine problems. In International Health Regulations, provision is made for disinfection, disinsection and deratization of carriers in ports of call, in order to protect the crew of the carrier, as well as travellers through and inhabitants of the country of the port of entry.

Each country, depending on its vulnerability, needs and possibilities, has developed a mechanism for prevention of introduction of vectors and reservoirs of diseases into its territories. Usually quarantine units of the Ministry of Health, in collaboration with port authorities, carry out inspection of the carrier and the port area for presence of vectors and reservoir of the diseases, and take necessary action for extermination of vectors and rodents. Vectors and rodent quarantine measures take two main forms; the first is concerned with port sanitation and the second with disinsection and/or deratting of the carrier.

WHO International Sanitary Regulations in Article 20 "requires that an area within the perimeter of every airport shall be kept free from Aedes Aegypti (vector) in its larval and adult stage".

The above statement is true about rodent control in port areas. In addition, according to Articles 17 and 54, the WHO International Health Regulations also require that each health administration shall designate a "number of approved ports and that each approved port shall have personnel competent to inspect ships for issue of Deratting Exemption Certificate, .... " further " a designated number of these

approved ports shall have available at their disposal equipment and personnel necessary to derat ships for the issue of Deratting Certificate", which is referred to in Article 54.

For aircraft disinsection the WHO Expert Committee on Insecticides, held in September 1960, recommends that "Disinsection of the passenger cabin and all other accessible interior space of aircraft, except the flight deck, should be done after the doors have been locked following embarkation and before take-off ....."

As noted above, for implementation of vector control in ports the following organizations are involved:

- Ministry of Health
- Port Authority
- National Aviation Administration or
- National Maritime Administration
- Railroads authorities
- Military establishments
- Private companies (Mosquito and rodent abatement services)

For successful control of vectors and reservoirs of diseases in ports, coordination of work among the above national agencies is essential. Concerted action must be taken in order to define the problem, to plan for implementation of control measures and to evaluate the work.

At national level, while the Ministry of Health has the key role in implementation of establishment of a vector control board for ports of entry and on carriers, participation with the above agencies will facilitate smooth running of the work.

Provision of well trained staff for port quarantine services, especially a vector control team for surveillance and inspection and control of vectors, could further increase the efficiency of operations.

While the Ministry of Health could be responsible for providing technical assistance, port authorities could provide administrative and logistic services for implementation of vector control in ports and on board carriers.

Provision of adequate legislation for the establishment of quarantine services, including control of insects and reservoirs of diseases, in all ports of entry, is essential. The WHO International Sanitary Regulations could be used as a guide for preparing the necessary byelaws.

The control of vectors in international sea ports and airports also requires international action and cooperation. In this respect, the International Health Regulation adopted by the 22nd World Health Assembly in 1969 specifies measures to ensure maximum security against the international spread of disease and vectors of disease. These measures, however, must be applied with a minimum of interference with traffic and the minimum of discomfort to travellers.

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