

**IMPORT RISK ANALYSIS SYSTEM (IRAS): A SYSTEM
TO ASSESS THE ANIMAL DISEASE RISKS ASSOCIATED
WITH THE IMPORTATION OF ANIMALS AND ANIMAL
PRODUCTS.**

MORLEY R.S.¹ and Acree J.²

The importation of animals and animal products inevitably involves a degree of disease risk on the part of the importing country. Veterinary officers charged with the responsibility of import programs require an objective, repeatable and defensible method of assessing these risks. IRAS is simple and transparent and provides a systematic, computerized approach whereby consistent assessments can be obtained for any importation. Information on animal disease statistics, current outbreak situation, animal and human demographics, veterinary infrastructure, disease control and import policies, disease situation in bordering countries, and the regionalization or area confinement of disease is compiled in a data base of data from member countries of the Office international des épizooties (OIE). This is merged with a data base on the animal and animal product imports, the transmissibility and survivability of disease agents and the measures that can be applied to reduce the risks associated with an importation. The process assimilates the relevant information and estimates the risks associated with the size of importation. Lastly, an estimate of the probability of domestic exposure in the importing country based on the scenario of exposure to animals or man is computed. Restrictions such as quarantine and diagnostic testing of animal imports, heat treatment, freezing and further processing of products, are risk management practices applied if the risk estimates are unacceptable. The process as a data management application alleviates the complexity of assessing multiple risks and provides a simple approach for any importing country to readily make import decisions on animal and animal product importation. In addition it provides a single source of information which can respond to specific queries on animal disease occurrence in exporting countries and modes of transmission, natural, secondary and reservoir hosts and vectors for each disease.

¹ Animal Health Division, Agriculture Canada, 2255 Carling Avenue, Ottawa, Ontario, K1A 0Y9. ² Policy and Program Development, Animal and Plant Health Inspection Service, U.S. Department of Agriculture, Federal Building, Hyattsville, Maryland, 20782.