

Book Review

World Health Organisation, 2002

Terrorist Threats to Food:

Guidance for Establishing and Strengthening Prevention and Response Systems

ISBN: 924 154 584 4

Book Review: Dr Ian McKay,

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This publication highlights the susceptibility of the world's food supply to terrorist attacks. Unlike static structures such as airports and railway lines which are more tangible items to secure and identify security breaches, food is omnipresent and is something the world's population trustingly ingest numerous times a day.

The food supply is particularly vulnerable to terrorist attack because of the vast array of potential contaminants and the magnitude of the food distribution network from agricultural commodities through to processed food. Potential contaminants range from more exotic toxins such as ricin, laboratory pathogens and radio nucleides to common household and industrial chemicals. Each has the potential to sicken or kill many people, devastate trade and create a fever of high anxiety. The publication puts forward a useful framework to build upon existing prevention, detection and response mechanisms to address potential attacks on the food supply.

The size and nature of the food industry gives little opportunity for government intervention without

considerable resource expenditure: something that is out of the reach of many countries. While initiatives can be more easily put in place at the borders, the publication identifies that it is the food industry itself that must maintain security along the food chain. To this end it notes that "all segments of the food industry could develop security and response plans for their establishments, proportional to the threat and their resources."

For many businesses though, terrorist attack on their premises, vehicles or product is not a tangible risk in a highly competitive corporate world. Such threats remain as threats alone. Nevertheless more and more businesses are moving to Hazard Analysis and Critical Control Point (HACCP) based food safety programs to help them identify potential hazards in their operations and the means to control them. Being mindful of the potential for deliberate

contamination is something that businesses should consider when drawing up or updating a business food safety program.

Effective surveillance systems are at the core of detecting a terrorist attack on the food supply. However, even countries with the most effective national systems can struggle to identify the cause of a widespread outbreak of food poisoning and many weeks can intervene between cases being reported and a cause being identified: highlighting yet again the vulnerability of the food supply. Even then a terrorist link may not be immediately obvious. The WHO in this document provides useful advice on strengthening national systems for detection and response with the premise of augmenting existing programs.

Being a paper for all member states, it, by necessity, puts forward a framework that cannot be implemented by some countries at this time as the key infrastructure for both government and industry is lacking. However, there are good reasons for all member states to move to strengthen capacity by government and industry to prevent, detect and respond to all outbreaks of foodborne illness be they accidental or deliberate. This document is a most valuable tool in an ongoing process to secure the world's food supply from deliberate attack.

Full text available at http://www.who.int/foodsafety/publications/fs_management/terrorism/en/.

Book Review

Food Safety Department, World Health Organization, Geneva, 2003

The present state of foodborne disease in OECD countries

J Rocourt, G Moy, K Vierk and J Schlundt.

ISBN: 92 4 159109 9

Book Review: Luba Tomaska,

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Foodborne illness is a globally recognised public health issue, with many governments, as well as international organisations such as the WHO and FAO, placing increasing focus on reducing its occurrence and extent. A good understanding of the burden of foodborne illness in the community is a cornerstone of any public health policy aimed at its effective management.

“The present state of foodborne disease in OECD countries” broadly examines some of the causes of foodborne illness in Organisation for Economic Co-operation and Development member countries, ascribed to microbiological and chemical agents. It also reflects on the causes of the emerging patterns over the last couple of decades and draws together information about the extent of the major foodborne illnesses.

In trying to estimate the extent of the problem, the paper addresses the difficulties in comparing data collected for different purposes, using different methods, and using disparate health information systems. Different purposes include

information collected to detect early outbreaks to those collected to estimate the extent of foodborne illness. Problems also occur with information collected from disparate surveillance systems, both active and passive. The ever-present problem of the vast underreporting of sporadic cases as opposed to outbreaks is also visited.

The paper suggests the incidence of foodborne illness in OECD countries is increasing. But there are several confounders such as increasing investment in surveillance networks and systems, changes in the patterns of food production, distribution and consumption, and new food safety management systems. These make attempts at estimating the extent of the burden a movable feast.

The paper concludes that it is difficult to produce numerical comparisons of foodborne disease in OECD countries. However, the collated data suggests that a higher number of cases are reported for bacterial agents than viral agents

in food, with campylobacteriosis as the most frequent bacterial foodborne disease. Incidence rates for other foodborne pathogens are provided. The authors do, however, raise questions about the vast underreporting of viral diseases of foodborne origin. While the paper visits chemicals as a cause of foodborne illness, clearly the long-term nature of the cause and effect makes this issue difficult in terms of direct evidence in most cases.

In its conclusions, the paper addresses the much-needed research necessary to underpin future quantification of the burden of foodborne illnesses. This includes better surveillance, more extensive epidemiology and more extensive case studies that link foodborne disease-causing agents to a specific food commodity. This is a paper that collates and digests useful data and addresses some of the difficulties in making sense of it, as well as outlining the future needs of estimating the burden of foodborne illness. It provides valuable and thorough examination of existing available information in OECD countries.

Full text available at http://www.who.int/foodsafety/publications/foodborne_disease/oecd/en/.

Book Review

World Organisation for Animal Health, 2003.

Sydney Olympic Games and Paralympics: Australia's biosecurity measures.

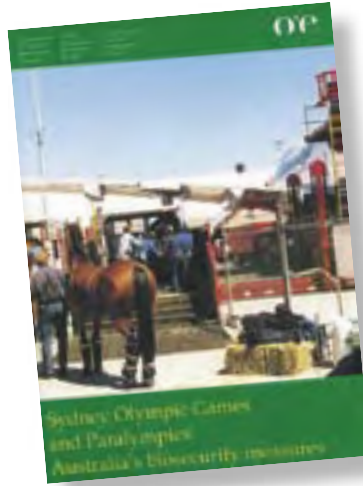
ISBN 92-9044-578-5

Reviewer, Peter Koob

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Hosting the Summer Games of the XXVII Olympiad was an honour for Australia, but posed very significant risks to Australia's unique biosecurity status. An enormous number of people and animals entered Australia from all four corners of the world, with the accompanying risk of the introduction of pests or diseases that could seriously harm industry or environment.

To ensure that Australia's biosecurity was not compromised, a risk management approach was adopted leading to measures being implemented by governments, industry and the community. These measures included a carefully planned enhancement of border controls, the appropriate management of horses imported for equestrian events, and the establishment of specific emergency management arrangements.



Nearly 750,000 people arrived at Sydney airport in two months and more than 15,000 prohibited items such as food and plant products were seized, with over 3,500 not declared. 270 yachts and eight cruise ships visited Sydney Harbour, each requiring quarantine clearance as well as special monitoring and disposal of waste materials.

Over 200 horses were imported into Australia, with 160 groomers and 100 tonnes of equipment. Given that Australia is free from most serious diseases that may affect horses, and from diseases that horses and equipment may carry, strict precautions were required. These included screening of animals prior to departure and placement

in pre-embarkation quarantine for 14 days, monitoring of health and welfare during transport and on arrival, and disposal of all waste products in Australia by deep burying.

The Sydney Olympics created a number of emergency risks relating to public health, animal health, and terrorism. Emergency plans and procedures to manage the likely range of contingencies were documented, with attendant training and exercising. This required very close co-operation between Olympics organisers, emergency services, public and animal health professionals, and intelligence agencies.

This booklet concisely documents the measures put in place to protect Australia's biosecurity before, during and after the Sydney Olympics, and provides a number of blueprints for how such large international events can be conducted in the future.

Available at http://www.oie.int/eng/publicat/ouvrages/a_113.htm.

Book Review

Food and Agriculture Organization,
Rome

Preparation of foot-and-mouth
disease contingency plans.

W.A.Geering and J.Lubroth, (2002)

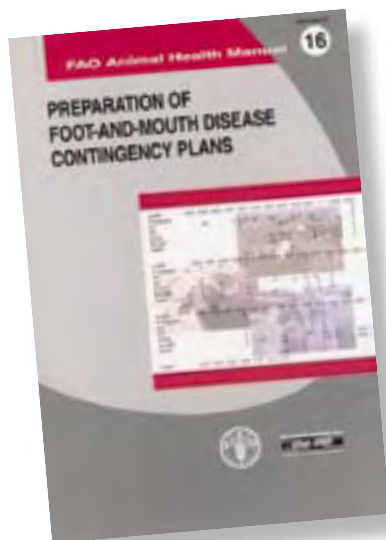
FAO Animal Health Manual, No. 16,
ISSN 1020-5187

Reviewer: Peter Koob

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This manual is one of a series entitled 'FAO Animal Health Manuals'. While many of the documents in this series deal with technical and veterinary aspects of disease control, a number cover emergency management, both generically and for some of the most serious epidemic livestock diseases such Rift Valley fever, contagious bovine pleuropneumonia and African swine fever.

The manual deals with FMD, a highly contagious disease of cloven-hoofed animals that is the *bête noire* of animal industries worldwide, occurring throughout most of Africa and Asia, and much of South America. Caused by a small RNA virus of which there are more than 60 subtypes or 'strains', FMD is not usually lethal in adult animals. It causes serious production losses and often kills young animals. This is of grave concern for developing countries because of the impact it has on farmer livelihoods through reduced milk production, drops in animal growth rates, reduced survival of young animals, and a reduction of the utility of beasts of burden. The most serious aspects of the disease from Australia's point of view is the devastating effects it would have on trade, the economy and rural societies.



The manual covers a wide range of issues in relation to FMD, including the format of a national FMD contingency plan, nature and risk analysis of the disease, prevention, organisation, and preparedness. While quite sweeping in its subject matter, from the perspective of Australia in 2004, this manual seems a little dated.

It concentrates on the roles of national veterinary services to the near exclusion of other government agencies, and does not consider a whole-of-government approach. Given the rapid potential spread of FMD, and the resource-intensive measures required to control or eradicate it, it is clear that veterinary services alone will not succeed in managing an outbreak. Thus, all relevant, available government and industry resources must be brought to bear in a suspected or actual FMD outbreak.

There are a number of types of plans mentioned without any clear articulation of the connection of these plans. In particular, it is recommended that the national contingency plan contain a number of contingency, support, and

action plans. This is probably due to confusion between preparedness and planning; the former being broader and defined as "Arrangements to ensure that, should an emergency occur, all those resources and services which are needed to cope with the effects can be efficiently mobilised and deployed" and the latter being defined as "A documented scheme of assigned responsibilities, co-ordination arrangements, actions and procedures, required in the event of an emergency". This could have been cleared up if the manual was entitled 'Prevention and Preparedness for Foot-and-Mouth Disease Outbreaks'.

Another potential difficulty with the manual, and the other contingency planning manuals in this series, is that they appear to advocate the development of a contingency plan for each specific disease. This, if followed to the letter, would create a series of repetitive plans as many of the issues regarding the management of resources, communications, co-ordination and so on will be the same. It is wiser to develop a basic emergency animal disease preparedness system, and have specific policies and strategies for dealing with specific diseases.

Nevertheless, this manual is extremely comprehensive, and will assist many countries to ensure that their livestock industries remain secure from emergency animal diseases.

Full text available at <http://www.fao.org/DOCREP/006/Y4382E/Y4382E00.HTM>.