

DEVISING IMPORT HEALTH MEASURES FOR ANIMAL COMMODITIES

This paper provides guidance to OIE Members on the use of the animal health information in the OIE World Animal Health Information Database (WAHID) and the recommendations in the OIE *Terrestrial Animal Health Code* (the *Terrestrial Code*), to devise import health measures for animal commodities. The health measures aim to minimise the risks to animal and public health associated with trade in such commodities.

The commodities discussed are beef, pigmeat, poultry meat and milk, and hence reference is made only to the *Terrestrial Code*. Subject to requests from Members, other commodities including aquatic animal commodities could be discussed in an expanded paper.

1. Setting health measures

The World Trade Organization (WTO) Agreement on the Application of Sanitary and Phytosanitary Measures (the SPS Agreement) allows WTO Members two options in setting health measures. The first option, and the one strongly encouraged by the SPS Agreement, is for Members to base their health measures on OIE international standards such as the *Terrestrial Code*. The second option applies in the absence of a relevant standard or when a Member chooses to adopt a higher level of protection than that provided by the OIE standard. This option necessitates the use of scientific risk analysis to determine whether importation of a particular commodity poses a significant risk to human or animal health and, if so, what health measures could be applied to reduce that risk to a level acceptable to the importing country.

Even if an importing country applies the health measures recommended in the *Terrestrial Code*, some form of risk analysis may still be necessary to ensure that there is a sound defensible framework for combining the hazards (pathogens) linked to the commodity, the disease statuses of the exporting and importing countries, and the recommendations in the *Terrestrial Code*.

The import health measures determined as a result of the risk analysis process may be a combination of the recommendations in the *Terrestrial Code* and additional measures imposed by the importing country.

2. Member obligations

If international trade in animal commodities is to be conducted safely and without unjustified restrictions, trading partners must meet their obligations as members of the OIE and of the WTO.

2.1 Notification obligations

Chapter 1.1. of the *Terrestrial Code* (Notification of diseases and epidemiological information) obliges each Member to make available to others, through the OIE, whatever information is necessary to minimise the spread of animal diseases of international significance and to assist in improving the worldwide control of these diseases. To achieve this, the OIE recommends that Members comply with the notification requirements specified in Article 1.1.3. of the *Terrestrial Code* (Appendix 2), and that their reports conform as closely as possible to the official OIE disease reporting format.

To assist Members in preparing accurate reports, Article 1.1.3. describes in detail the events which need to be reported to the OIE and the relevant time frame for reporting. These obligations include the diagnosis of a pathogen in the absence of clinical signs and the finding of evidence of infection in wild animals (for example, in birds which may have migrated) which may have little or no bearing on the safety of traded commodities from domestic animals. Members are also asked to provide information on the measures they have taken to prevent the spread of diseases, and related matters.

2.2 General obligations

Chapter 5.1. of the *Terrestrial Code* describes Members' general obligations and those specific to importing or exporting countries.

The general obligations include:

- a) to maximise harmonisation of the sanitary aspects of international trade, Veterinary Authorities should base their import health measures on OIE standards;
- b) the animal health situation in the exporting country, in the transit country or countries and in the importing country should be considered before determining the health measures;
- c) certification requirements should be exact and concise, and should clearly reflect the agreed positions of the trading partners.

The obligations on the importing country include:

- d) the health measures for the commodities should comply with the national level of protection that it has chosen for animal and public health;
- e) the international veterinary certificate should not include measures for the exclusion of pathogens or diseases which are present in the importing country and are not subject to an official control programme;
- f) the measures applying to pathogens or diseases subject to official control programmes in a country should not provide a higher level of protection on imports than the protection provided for the same pathogens or diseases by the measures applied within that country;
- g) the international veterinary certificate should not include measures for pathogens or diseases which are not OIE listed, unless the importing country has identified the pathogen as presenting a significant risk for that country, after conducting a risk analysis according to the recommendations in Section 2. of the *Terrestrial Code*.

On request, the exporting country should be prepared to supply to the importing country information which is relevant to the safety of the traded commodity. This may include the outcomes of any recent evaluation of its veterinary services and of any risk analyses conducted by other countries.

3. Determining import regulations

3.1 Utilising information in WAHID

A comprehensive range of information is available from the WAHID Web site¹ for a specific Member, a region or a group of selected Members on:

- immediate notifications submitted by Members in response to exceptional disease events detected in those Members, as well as follow-up reports about these events;
- six-monthly reports describing the situation in each Member for the OIE-listed diseases;
- annual reports providing further background information on animal health, veterinary services and laboratory facilities, etc.

Disease outbreak maps indicate the location of disease events reported in immediate notifications or follow-up reports, and disease distribution maps show the presence or absence of disease at the national and sub-national level, based on the six-monthly reports.

The Web site also contains Member reports on their animal health situation (by month and first administrative division, when that information is provided by the Member). For each OIE-listed disease, the report indicates whether it has been reported as present or absent from the Member during the specified time period. Members that claim freedom from a specified disease (according to their recent disease situation reports) are listed.

It should be noted that the OIE assesses and verifies the status of Members for freedom from four diseases only - foot and mouth disease (FMD), bovine spongiform encephalopathy (BSE), rinderpest and contagious bovine pleuropneumonia. Claims made by a Member with regard to freedom from other diseases are not verified by the OIE but are published for the information of Members. The Member making a claim of freedom for one of the other diseases discussed in this paper needs to be able to satisfy the concerns of trading partners that it meets the *Terrestrial Code* recommendations for freedom by providing the relevant information. Equally, a trading partner is obliged to assess such a claim in an objective manner.

WAHID provides the reporting history of Members to help determine whether the information in WAHID about a Member is reliable and up to date.

WAHID allows two Members to be compared² with regard to their disease status, based on their most recent six-monthly reports. WAHID divides pathogens into the following categories:

- a) 'probable hazards' - pathogens present in the exporting country but absent from the importing country;
- b) 'possible hazards' - pathogens for which no information or insufficient information is available;

¹ <http://www.oie.int/wahid-prod/public.php?page=home>

² http://www.oie.int/wahid-prod/public.php?page=trade_status

- c) 'unlikely to be hazards' - pathogens either absent from both countries, or present in the importing country.

3.2 Hazard identification

The first step in the process of determining import health measures is to perform a *hazard identification* which is the process of identifying the hazards (pathogens) that could be introduced into the importing country through the commodity. The data in WAHID are used to list all the hazards of concern, through a comparison of the disease statuses of the importing and exporting countries.

The second step is to refine the list of hazards as follows:

- a) 'probable hazards' need to be retained if the pathogens can be associated with the commodity (for example, using beef as the commodity, pathogens of cattle would be listed but not pathogens affecting only birds or horses);
- b) 'possible hazards' should be retained pending the receipt of further information which may allow the pathogen to be removed from the list or which may confirm the correctness of its listing; for example, the results of a targeted survey may show with a high level of confidence that the pathogen is not present in the domestic beef cattle population of the exporting country;
- c) 'unlikely to be hazards' - pathogens which are present in the importing and exporting countries may be retained only if they are subject to a control or eradication program within the importing country.

When discussing which pathogens should be listed, different strains or serotypes of the same pathogen (for example FMD types A and O, bluetongue serotypes 1 and 15) are considered to be different hazards, and the importing country may be justified in taking measures to prevent the entry of strains not present in that country.

A revised list of pathogens of concern is thus drawn up. In drawing up this list, care should be taken to ensure that data relating to all relevant chapters and articles in the *Terrestrial Code* are available and taken into account. For example, when claims are made regarding free zones or compartments, the *Terrestrial Code* articles on surveillance should be referred to regarding the type and quantity of data needed to support such claims. The importation of a processed meat product would necessitate reference to the articles on the inactivation of pathogens to provide assurance that the processing carried out is sufficient.

This list will then need to be further refined by taking into account the *Terrestrial Code* recommendations for diseases associated with the commodity.

3.3 Using the Codes

In general, each chapter in Volume 2 of the *Terrestrial Code* addresses a single disease and is structured as follows, although not all chapters yet contain the indicated structure in full:

- a) a brief description of the disease;

- b) a list of commodities which are considered not to require any disease-specific measures, irrespective of the status of the exporting country for the disease;
- c) a list of commodities which are considered to require the measures described later in the chapter, with the understanding that an importing country should not impose additional measures for such commodities;
- d) a list of the factors which should be taken into account in assessing the risks presented by the exporting country for that disease;
- e) lists of the requirements which should be met by a country/zone/compartiment in order to achieve a specified disease status, for example 'disease free country', 'free zone with vaccination', 'moderate risk', 'free flock';
- f) articles containing the recommended health measures to be applied to commonly traded commodities, taking into account the likelihood of the pathogen being transmitted through that commodity and the disease status of the exporting country.

In the *Terrestrial Code* chapters where there is no recommendation for a particular commodity, it means that OIE experts have not yet developed relevant health measures; in this case, a Member should follow the second option described above and base its import health measures for that commodity on a scientific risk analysis.

The OIE has developed a *Handbook on Import Risk Analysis for Animals and Animal Products*. This handbook provides a framework for the risk analysis process based on the recommendations in the *Terrestrial Code* to ensure that the disease risks posed by imported animal commodities are identified and managed effectively. Volume I of this handbook introduces the concepts of import risk analysis and discusses qualitative risk analysis, while Volume II addresses quantitative risk analysis.

Table 1 below lists the articles in the *Terrestrial Code* that contain recommendations for beef, pigmeat, poultry meat and milk, with regard to some major international diseases. These recommendations are found in the disease-specific chapters and need to be combined into a set of recommended measures for the commodity in the form of an international veterinary certificate (see Chapter 5.10.). When combining these recommendations, care should be taken to ensure that all relevant chapters and articles in the *Terrestrial Code* are taken into account; for example, the articles on surveillance (when importing fresh meat from a zone with a claimed disease-free status) and the inactivation of pathogens (when importing a processed meat product).

Table 1 Measures recommended in the *Terrestrial Code*

Explanatory Notes to the table:

Table 1 below lists the articles in the *Terrestrial Code* that contain recommendations for beef, pigmeat, poultry meat and milk, with regard to some major international diseases. Where fresh meat is eligible for trade it can be assumed that meat products will be eligible under similar conditions. However where fresh meat is not recommended to be traded from countries, zones or compartments, it may be possible to establish measures for trade in meat products. Where this is the case, this has been noted in Table 1.

Notes in the Table:

Note 1: excluding feet, head and viscera

Note 2: fresh pigmeat not recommended to be traded from infected countries or zones

Note 3: deboned skeletal muscle meat with conditions

Note 4: excluding lung

Note 5: fresh meat from wild pigs

Note 6: fresh poultry meat not recommended to be traded from countries, zones or compartments of unknown status

Disease	Exporting country status	Beef	Milk	Pig meat	Poultry meat
Foot and mouth disease	free country / zone without vaccination	8.5.20.	8.5.25.	8.5.20.	no measures necessary for trade
	free country / zone with vaccination	8.5.21.(note 1)	8.5.25.	8.5.22.	no measures necessary for trade
	infected country / zone	8.5.23. (note 1)	8.5.26.	8.5.24. (for pigmeat products)(note 2)	no measures necessary for trade
Bovine spongiform encephalopathy	regardless of status	11.6.1 (note 3)	11.6.1	no measures necessary for trade	no measures necessary for trade
	negligible risk	11.6.10.	no measures necessary for trade	no measures necessary for trade	no measures necessary for trade
	controlled risk	11.6.11.	no measures necessary for trade	no measures necessary for trade	no measures necessary for trade
	undetermined risk	11.6.12.	no measures necessary for trade	no measures necessary for trade	no measures necessary for trade
Bluetongue	regardless of status	no measures necessary for trade	no measures necessary for trade	no measures necessary for trade	no measures necessary for trade

Table 1 Measures recommended in the *Terrestrial Code* (contd)

Disease	Exporting country status	Beef	Milk	Pig meat	Poultry meat
Vesicular stomatitis	regardless of status	no measures necessary for trade	no measures necessary for trade	no measures necessary for trade	no measures necessary for trade
Rift Valley fever	infection free country /zone	8.11.7.	no measures necessary for trade	no measures necessary for trade	no measures necessary for trade
	infected country / zone without disease	8.11.9.	no measures necessary for trade	no measures necessary for trade	no measures necessary for trade
	infected country / zone with disease	8.11.11.	no measures necessary for trade	no measures necessary for trade	no measures necessary for trade
Rinderpest	free country	8.12.11.	8.12.14.	8.12.11.	no measures necessary for trade
	infected country	8.12.12.	8.12.15.	8.12.12.	no measures necessary for trade
CBPP	infected country	11.9.2. (Note 4)	no measures necessary for trade	no measures necessary for trade	no measures necessary for trade
Bovine cysticercosis	regardless of status	11.4.2	no measures necessary for trade	no measures necessary for trade	no measures necessary for trade
Bovine tuberculosis	nil	11.7.9.	11.7.10.	no measures necessary for trade	no measures necessary for trade
Classical swine fever	free country / zone / compartment	no measures necessary for trade	no measures necessary for trade	15.3.12.	no measures necessary for trade
	regardless of status	no measures necessary for trade	no measures necessary for trade	15.3.13. (note 5)	no measures necessary for trade
African swine fever	free country / zone / compartment	no measures necessary for trade	no measures necessary for trade	15.1.12.	no measures necessary for trade
	infected country	no measures necessary for trade	no measures necessary for trade	15.1.14. (for pigmeat products)(note 2)	no measures necessary for trade

Table 1 Measures recommended in the *Terrestrial Code* (contd)

Disease	Exporting country status	Beef	Milk	Pig meat	Poultry meat
African swine fever (contd)	free country / zone	no measures necessary for trade	no measures necessary for trade	15.1.13. (note 5)	no measures necessary for trade
Teschovirus encephalomyelitis	free country	no measures necessary for trade	no measures necessary for trade	15.6.10.	no measures necessary for trade
	infected country	no measures necessary for trade	no measures necessary for trade	15.6.11.	no measures necessary for trade
Swine vesicular disease	free country	no measures necessary for trade	no measures necessary for trade	15.5.11.	no measures necessary for trade
	infected country	no measures necessary for trade	no measures necessary for trade	15.5.12.	no measures necessary for trade
Aujeszky's disease	regardless of status	no measures necessary for trade	no measures necessary for trade	no measures necessary for trade	no measures necessary for trade
New castle disease	ND free country / zone / compartment	no measures necessary for trade	no measures necessary for trade	no measures necessary for trade	10.13.14.
	ND infected country/zone	no measures necessary for trade	no measures necessary for trade	no measures necessary for trade	10.13.15. (for poultry meat products) (note 6)
Avian influenza	NAI free country / zone / compartment	no measures necessary for trade	no measures necessary for trade	no measures necessary for trade	10.4.19.
	HPNAI free country / zone / compartment	no measures necessary for trade	no measures necessary for trade	no measures necessary for trade	10.4.20.
	NAI regardless of status	no measures necessary for trade	no measures necessary for trade	no measures necessary for trade	10.4.21. (for poultry meat products) (note 6)
Infectious bursal disease	country considered infected	no measures necessary for trade	no measures necessary for trade	no measures necessary for trade	subject to risk assessment

4. Drawing up health certificates

An international veterinary certificate should be drawn up as follows:

- identify the commodity to be imported;
- use the data in WAHID to identify all the pathogens which may be of concern, through a comparison of the disease statuses of the importing and exporting countries;

- list the pathogens against which the importing country is justified in taking measures for that commodity (see 3.2 above), taking into account the country's obligations (as described in 2.2 above) and the data available;
- list the health measures recommended for each of these pathogens by referring to the articles in the *Terrestrial Code* relevant to the commodity (Table 1 lists the relevant articles, the full text of which may be found via http://www.oie.int/eng/normes/mcode/en_sommaire.htm);
- list when relevant the additional health measures to be imposed by the importing country as a result of the risk analysis; and
- use the model certificates presented in Chapter 5.10. of the *Terrestrial Code* as templates, with the contents of the certificate being adapted to the commodity as required.

See Appendix 3 for examples of the contents of veterinary certificates for beef, milk, pigmeat and poultry meat.

Glossary

Competent Authority means the Veterinary Authority or other Governmental Authority of an OIE Member having the responsibility and competence for ensuring or supervising the implementation of animal health and welfare measures, international veterinary certification and other standards and recommendations in the *Terrestrial Code* in the whole territory.

Fresh meat means meat that has not been subjected to any treatment irreversibly modifying its organoleptic and physicochemical characteristics. This includes frozen meat, chilled meat, minced meat and mechanically recovered meat.

Hazard means a biological, chemical or physical agent in, or a condition of, an animal or animal product with the potential to cause an adverse health effect.

International veterinary certificate means a certificate, issued in conformity with the provisions of Chapter 5.2., describing the animal health and/or public health requirements which are fulfilled by the exported commodities.

Listed diseases means the list of transmissible disease agreed by the World Assembly of OIE Delegates and set out in Chapter 1.2. of the *Terrestrial Code*.

Meat means all edible parts of an animal.

Meat products means meat that has been subjected to a treatment irreversibly modifying its organoleptic and physicochemical characteristics.

Milk means the normal mammary secretion of milking animals obtained from one or more milkings without either addition to it or extraction from it.

Milk product means the product obtained by any processing of milk.

Notifiable disease means a disease listed by the Veterinary Authority, and that, as soon as detected or suspected, must be brought to the attention of this Authority, in accordance with national regulations.

Sanitary measure means a measure, such as those described in various Chapters of the *Terrestrial Code*, destined to protect animal or human health or life within the territory of the Member from risks arising from the entry, establishment and spread of a hazard.

Veterinary Authority means the Governmental Authority of an OIE Member, comprising veterinarians, other professionals and para-professionals, having the responsibility and competence for ensuring or supervising the implementation of animal health and welfare measures, international veterinary certification and other standards and recommendations in the *Terrestrial Code* in the whole territory.

Veterinary Services means the governmental and non-governmental organisations that implement animal health and welfare measures and other standards and recommendations in the *Terrestrial Code* in the territory. The Veterinary Services are under the overall control and direction of the Veterinary Authority. Private sector organisations, veterinarians or veterinary paraprofessionals are normally accredited or approved to deliver functions by the Veterinary Authority.

EXTRACTS/REFERENCES FROM THE 2009 TERRESTRIAL CODE

Notification obligations

Article 1.1.1.

Article 1.1.2.

Article 1.1.3.

General obligations

Article 5.1.1.

Article 5.1.2.

Article 5.1.3.

Certification procedures

Article 5.2.1.

Article 5.2.2.

Article 5.2.3.

Article 5.2.4.

Model certificates

Chapter 5.10.

EXAMPLES OF HEALTH CERTIFICATES

The following examples provide guidance regarding the content of health certificates for beef, milk, pigmeat and poultry meat from exporting countries of indicated health status. The *Terrestrial Code* provides alternative recommendations for some diseases and an importing country is able to apply other measures based on the outcomes of a risk analysis.

Beef

Beef from a country

- which is FMD free but where vaccination is practised,
- which presents a controlled BSE risk,
- which is infected with Rift Valley fever with disease,
- which is rinderpest free,
- which is infected with CBPP and bluetongue, and
- which is not known to be free from bovine cysticercosis.

The international veterinary certificate should attest that **the entire consignment of meat:**

- comes from animals which have been kept in the FMD free country where vaccination is practised since birth, or which have been imported in accordance with *Terrestrial Code* articles dealing with the importation of live cattle into FMD free countries;
- comes from animals which have been kept in the country for at least 3 months prior to slaughter (rinderpest);
- comes from animals which have been slaughtered in an approved abattoir, and have been subjected to ante-mortem and post-mortem inspections with favourable results;
- excludes meat from the feet, head or viscera (FMD), lung (CBPP) and mechanically separated meat (BSE);
- is deboned (BSE);
- comes from cattle which were not subjected to a stunning process prior to slaughter with a device injecting compressed air or gas into the cranial cavity, or to a pithing process (BSE);
- has been prepared in a manner to avoid contamination with brains, eyes, spinal cord, tonsils, distal ileum, skull and vertebral column (BSE);
- comes from carcasses which were submitted to maturation at a temperature above +2°C for a minimum period of 24 hours following slaughter (RVF)
- has been recognised as being free from bovine cysticercosis.

Milk

Milk for human consumption from a country

- which is FMD infected but where an official control programme exists,
- which presents a controlled BSE risk,
- which is infected with Rift Valley fever with disease,
- which is rinderpest free,
- which is infected with CBPP and bluetongue, and
- which is not known to be free from bovine tuberculosis.

The international veterinary certificate should attest that **the entire consignment of milk:**

- comes from cattle herds which were not infected or suspected of being infected with FMD at the time of milk collection;
- has been processed to ensure the destruction of the FMD virus using a sterilisation process applying a minimum temperature of 132°C for at least one second, and was subject to the necessary precautions after processing to avoid contact of the products with any potential source of FMD virus;
- comes from animals which have been kept in the country since birth or for at least 3 months (rinderpest);
- was subjected to pasteurisation.

Note that, according to the *Terrestrial Code*, no requirements are necessary for BSE, CBPP or bluetongue irrespective of the status of the exporting country for these diseases.

Note also that the processing recommended to ensure the destruction of the FMD virus would also address any risk posed by the milk being derived from animals in a herd not free from bovine tuberculosis and Rift Valley fever.

Pig meat

Pigmeat for human consumption from a country

- which is FMD free where vaccination is practised,
- which is free from rinderpest,
- which is free from CSF,
- which has ASF free zones,
- which is considered infected with Teschovirus encephalomyelitis and SVD, and

- which is not known to be free from Aujeszky's disease.

The international veterinary certificate should attest that **the entire consignment of pigmeat:**

- comes from animals which were kept in the FMD free country where vaccination is practised since birth or which were imported in accordance with *Terrestrial Code* articles dealing with the importation of live pigs into FMD free countries;
- comes from animals which were kept in the country for at least 3 months prior to slaughter (rinderpest and CSF, at least 40 days for ASF is also fulfilled);
- comes from animals which have not been kept in an Teschovirus encephalomyelitis or SVD infected zone;
- comes from animals which were slaughtered in an approved abattoir (not located in an Teschovirus encephalomyelitis or SVD infected zone),
- comes from animals which were subjected to ante-mortem and post-mortem inspections with favourable results;

Note that, according to the *Terrestrial Code*, no measures are necessary for Aujeszky's disease.

Poultry meat

Poultry meat for human consumption from a country

- which is infected with Newcastle disease (ND),
- which is free from highly pathogenic avian influenza (HPAI),
- which is of unknown status for infectious bursal disease (IBD).

The international veterinary certificate should attest that **the entire consignment of poultry meat:**

- comes from birds which have been kept in an HPNAI free country since they were hatched or for at least the past 21 days;
- comes from birds which have been slaughtered in an approved abattoir;
- comes from birds which have been subjected to ante-mortem and post-mortem inspections with favourable results;
- has been processed to ensure the destruction of NDV and the necessary precautions were taken to avoid contact with any source of NDV.

Poultry meat is not referenced in the IBD chapter so any measures applied would need to be based on the outcomes of a risk analysis.

Note that processing recommended to ensure the destruction of the NDV is under development in the *Terrestrial Code*.