

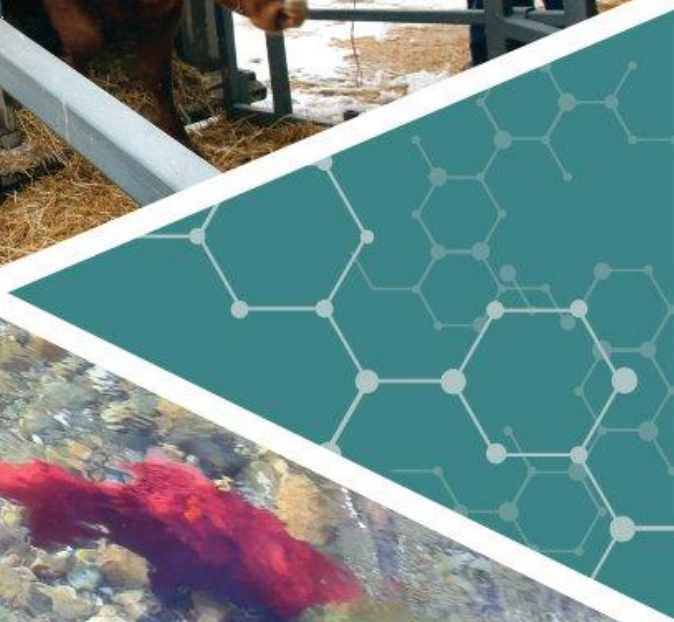


Risk Analysis

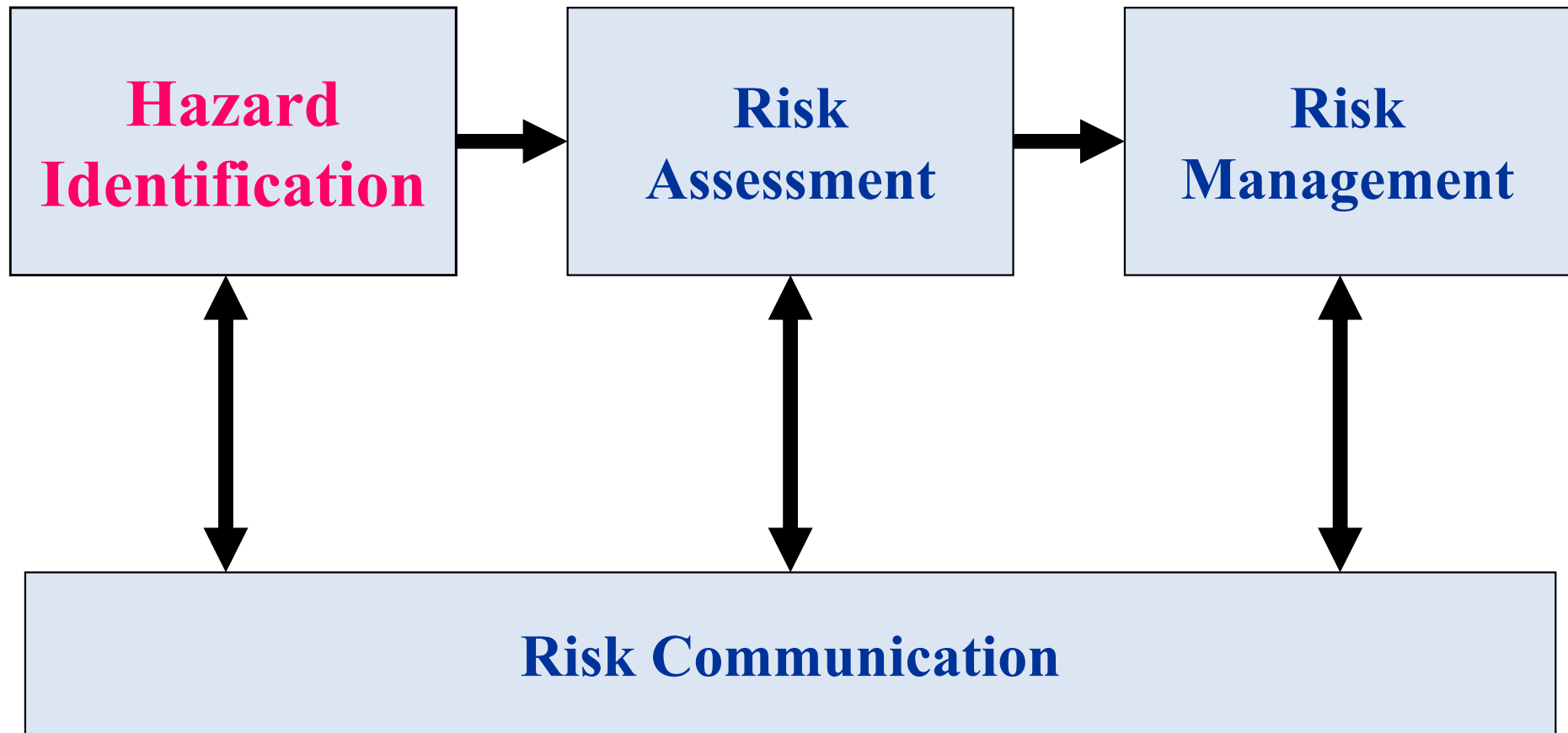
Hazard identification

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The OIE risk analysis framework



Hazard identification

- Identifies pathogenic agents
 - which could potentially produce adverse biological, environmental or economic consequences
 - known to affect the animals being imported, or from which the commodity is derived
- If you don't identify a hazard you can't assess or manage it!

Draw up a comprehensive list ...

... of all the pathogens associated with the commodity

- start with the diseases listed by the OIE
- add others as appropriate
- consult with stakeholders as necessary to refine the list

Some categories of pathogenic agents may be excluded ...

... from consideration depending on the nature of the commodity or the methods of production, manufacturing or processing

- gastro-intestinal parasites are not relevant for semen or embryos
 - Arboviruses such as bluetongue virus, which are transmitted by vectors, do not need to be considered for meat and meat products
 - highly processed commodities such as gelatine are not likely to be contaminated with bacteria or viruses
- document the rationale for exclusion

Safe commodities

- some disease-specific chapters in the Terrestrial Code list commodities determined to be safe for international trade
 - specific measures for these commodities should not be required regardless of the status of the exporting country, for example
 - Chapter 8.11 (Infection with *M tuberculosis* complex)
 - fresh meat and meat products originating from animals that have been subjected to ante- and post-mortem inspections as described in Chapter 6.2
 - cured hides, skins and trophies
 - gelatine, collagen, tallow and meat-and bone-meal

Hazard identification

- Is the commodity under consideration a potential vehicle for the pathogen?
 - assess the relevant epidemiology as well as the methods of production, manufacturing or processing normally applied to determine if the commodity being considered is potentially capable of harbouring the pathogen

Hazard identification

- Is the pathogen considered to be exotic to your country or region?
- Is the pathogen likely to be present in the exporting country or region?

Is the Competent Authority ...

... of either country able to satisfactorily substantiate any claims regarding the status of the pathogen?

- the likelihood of pathogenic agents being present in, or absent from the animal population of a country or subpopulations is assessed through an evaluation of
 - the quality of the Veterinary Service
 - identification and traceability of animals and/or animal products
 - surveillance and monitoring programmes
 - official control programmes
 - zones and/or compartments

Hazard identification

- Is the pathogen present in your country or region?
 - it should not be considered any further unless
 - it is subject to an official control programme
 - there are zones or compartments of different animal health status
 - the local strains are likely to be less virulent than those reported in the exporting country

In summary ...

- if the commodity is a potential vehicle for the pathogen and
 - the pathogen is likely to be present in the exporting country and
 - the pathogen is exotic to your country, or
 - present in your country, but subject to official control, or
 - there are zones or compartments of different animal health status, or
 - it is more virulent than strains reported in your country
- ... the pathogen is classified as a hazard
- transparently document the rationale for the conclusions reached

Does the Code provide sanitary measures ...

... for the hazards in the commodity under consideration?

- if so, apply the relevant measures
 - this is the preferred course of action unless domestic legislation, policy or other considerations require a complete risk analysis be undertaken

A risk analysis may be concluded ...

- if hazards are not identified, or
- if measures recommended in the OIE *Code* are applied to each hazard

Example of an import risk analysis

Peste des petits ruminants

- Title
 - Import risk analysis: chilled or frozen sheep and goat meat from a country or zone where PPRV is endemic
- Purpose
 - to assess the likelihood of PPR virus (*Paramyxoviridae*; Genus: *Morbillivirus*; Species: *Peste des petits ruminants virus*) spreading or becoming established in [*your country*] and its likely consequences as a result of importing chilled or frozen meat for human consumption derived from domestically reared sheep (*Ovis aires*) and goats (*Capra hircus*) in a country where PPRV is endemic
 - to recommend sanitary measures if appropriate

Example hazard identification (1)

Peste des petits ruminants virus

- pathogenic agent
 - *Paramyxoviridae*; Genus: *Morbillivirus*; Species: *Peste des petits ruminants virus*
 - OIE Listed disease of sheep and goats
 - not zoonotic
- Country status
 - exotic

Example hazard identification (2)

Peste des petits ruminants virus

- Epidemiology*
 - an acute, contagious viral disease mainly affecting sheep and goats
 - sheep are less susceptible than goats and PPRV may circulate undetected for some time
 - infected animals may be viraemic prior to the onset of clinical signs and may be slaughtered during the incubation period
 - while PPRV is an enveloped virus that is relatively fragile and easily inactivated in the external environment, it not rapidly inactivated in fresh meat may survive for some days in chilled meat and up to several months in salted or frozen meat

Reference: Biosecurity import risk analysis: Meat and meat products from ruminants and pigs, DRAFT for Public Consultation, Ministry for Primary Industries, New Zealand. February 2014

Example hazard identification (3)

Peste des petits ruminants virus

- conclusion

- meat from recently infected sheep or goats slaughtered before clinical onset is potentially capable of harbouring PPR virus

therefore

- PPR virus is classified as a hazard for further consideration in a risk assessment

Thankyou

Questions or comments?