

# JEMRA

## JOINT FAO/WHO EXPERT MEETINGS ON MICROBIOLOGICAL RISK ASSESSMENT

### Framework

In response to the request of the 22nd session of the Codex Alimentarius Commission in 1997, the Food and Agriculture Organization of the United Nations (FAO), in collaboration with the World Health Organization (WHO), convened a series of expert consultations and related activities to address microbiological aspects of food safety, and in particular microbiological risk assessment (MRA). These activities are known as the Joint FAO/WHO Expert Meetings on Microbiological Risk Assessment (JEMRA).

MRA has been identified as a useful tool for enabling informed actions and decisions aimed at improving food safety. It is recognized that MRA is still a developing science and remains beyond the capacities of many countries. The MRA activities promoted by FAO and WHO aim to optimize the utility of this tool and to ensure that it is equally available for use by both developing and developed countries.

### Importance

Today, food-borne pathogens pose new risks for consumers and are an increasing challenge to those working in the area of food safety. Changes in production and processing methods throughout the food chain, the evolution of consumption patterns and demands and emerging and re-emerging food-borne pathogens are contributing factors. The expansion of international trade in food has increased the risk of microbiological hazards being disseminated from the original point of production to locations that may be thousands of kilometres away.

### JEMRA

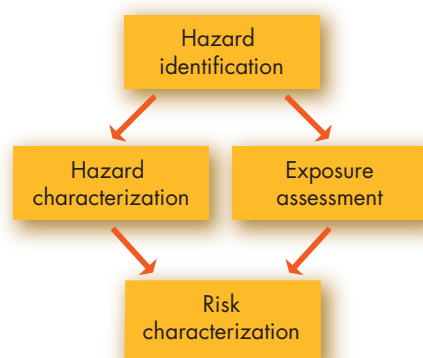
The Joint FAO/WHO Expert Meetings on Microbiological Risk Assessment are a series of ad hoc meetings and related activities, which are jointly organized and managed by the two organizations and undertaken to meet the needs of the Codex Alimentarius and member countries in the assessment and control of microbiological hazards in foods.



*Listeria monocytogenes*



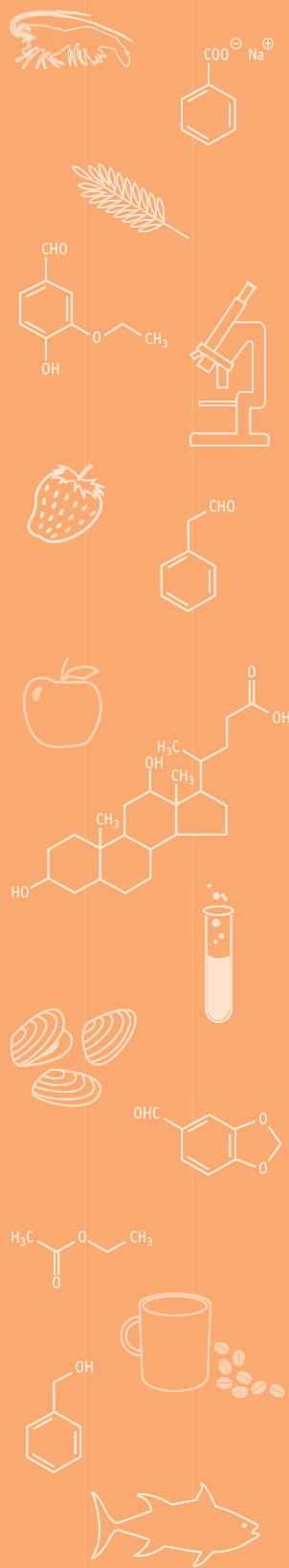
*Vibrio parahaemolyticus*



Four steps of microbiological risk assessment

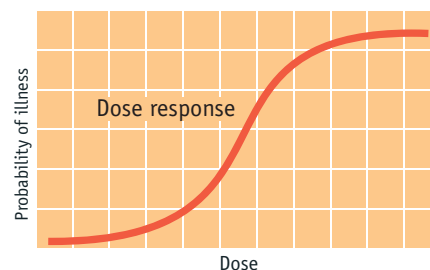
### New risks require new actions

Assessing the risks associated with microbiological hazards in foods, from the point of production to consumption, is a resource-intensive activity and requires a multidisciplinary approach. Through the activities of JEMRA, FAO is currently generating scientific data and information and developing tools that should contribute to ensuring safer food for consumers.



## JEMRA's objectives

- assessing the risks associated with food-borne pathogens
- providing guidance on data generation and access to relevant data
- developing guidelines on how to assess risks
- providing guidance on the application of risk assessment
- developing risk assessment tools



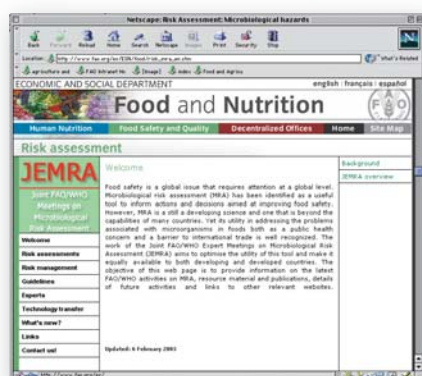
Results and reports of JEMRA activities are posted on the Internet ([http://www.fao.org/es/ESN/food/risk\\_mra\\_en.stm](http://www.fao.org/es/ESN/food/risk_mra_en.stm)) as they are developed and published in the new FAO/WHO Microbiological Risk Assessment Series.

### Risk assessments

- Salmonella* in eggs and broiler chickens
- Listeria monocytogenes* in ready-to-eat food
- Campylobacter* spp. in broiler chickens
- Vibrio* spp. in seafood

### Guidelines

- Hazard characterization
- Exposure assessment
- Risk characterization
- Using microbiological risk assessment in risk management



## How JEMRA works

JEMRA's objectives are achieved through:

- issuing public calls for experts to participate in its activities
- following transparent procedures for selecting experts and maintaining a roster
- issuing public calls for data and encouraging the global collection of data
- establishing multidisciplinary expert working groups composed of microbiologists, epidemiologists, veterinarians, food scientists and technologists, mathematicians, statisticians, etc.
- organizing expert meetings
- documenting working procedures
- conducting peer reviews of all technical papers
- publishing meeting and technical reports

## Information and technical support

To request further information or technical support in relation to JEMRA's work, please visit the JEMRA Web site at [http://www.fao.org/es/ESN/food/risk\\_mra\\_en.stm](http://www.fao.org/es/ESN/food/risk_mra_en.stm) or contact the FAO JEMRA Secretariat by e-mail: [jemra@fao.org](mailto:jemra@fao.org); or by fax: (+39) 06 57054593.