

# CODEX ALIMENTARIUS COMMISSION



Food and Agriculture  
Organization of the  
United Nations



World Health  
Organization

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Agenda Item 10

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## JOINT FAO/WHO FOOD STANDARDS PROGRAMME

### CODEX COMMITTEE ON FOOD HYGIENE

Fifty-fourth Session

Nairobi, Kenya

11 - 15 March 2024

### REVISION OF THE GUIDELINES ON THE APPLICATION OF THE GENERAL PRINCIPLES OF FOOD HYGIENE TO THE CONTROL OF VIRUSES IN FOOD (CXG 79-2012)

(Prepared by Canada and the Netherlands)

#### Background

1. At the 51st Session of the Committee on Food Hygiene (CCFH51)<sup>1</sup>, the CCFH forward work plan was revised to include the *Guidelines on the Application of General Principles of Food Hygiene to the Control of Viruses in Food* (CXG 79-2012) (hereafter referred to as “the guidelines”) for possible revision based on new information available on norovirus (NoV). Canada, with support from the Netherlands, offered to prepare a discussion paper on the possible revision of the guidelines for consideration by the Committee. CCFH52, conducted virtually with an abbreviated agenda, decided that all new work proposals, including the discussion paper on the revision of the guidelines, would be taken up for consideration at CCFH53.
2. This discussion paper<sup>2</sup> was prepared for consideration by CCFH53 and presented the basis for possible revision of the guidelines. CCFH53<sup>3</sup> responded favorably to the discussion paper and were generally in agreement with the areas presented there in which scientific advice would be needed in order to progress any revision.
3. CCFH53 agreed to request JEMRA to provide scientific advice on the following areas:
  - i. An up-to-date review of the foodborne viruses and relevant food commodities of highest public health concern
  - ii. A review of the scientific evidence on prevention and intervention measures and the efficacy of interventions in the food continuum
  - iii. A review of the analytical methods for relevant enteric viruses in food commodities
  - iv. A review of scientific evidence on the potential utility of viral indicators or other indicators of contamination
  - v. A review of the various risk assessment models with a view towards constructing more applicable models for wide use among member countries, including a simplified risk calculator.
4. CCFH53 further assigned priority to i, iii and iv in the above list and noted that Canada together with the Netherlands would provide a project document taking into account the scientific advice from JEMRA for consideration by CCFH54.
5. A first JEMRA meeting<sup>4</sup> was convened in September 2023 and a summary report from that meeting is available. A second JEMRA meeting on viruses is scheduled for February 2024.

<sup>1</sup> REP20/FH paragraph 118

<sup>2</sup> CX/FH 22/53/8

<sup>3</sup> REP23/FH paras 133-140

<sup>4</sup> Joint FAO/WHO Expert Meeting on microbiological risk assessment of viruses in foods Part 1: food attribution, analytical methods, and indicators, 18 – 22 September 2023. Summary and Conclusions. Available [here](#)

6. A project document taking into consideration the output of the first JEMRA meeting and other available information has been prepared by Canada and the Netherlands and is attached as Appendix 1.

**Recommendation**

7. CCFH54 is invited to consider the project document attached as Appendix 1, taking into consideration the discussion paper presented at CCFH53 and the discussions and conclusions of CCFH53, as well as the scientific advice provided by JEMRA, make amendments as it considers appropriate, and recommend new work on the revision of the guidelines for approval by CAC47.

**PROJECT DOCUMENT****REVISION OF THE *GUIDELINES ON THE APPLICATION OF GENERAL PRINCIPLES OF FOOD HYGIENE TO THE CONTROL OF VIRUSES IN FOOD (CXG 79-2012)*****1. Purpose and scope of the standard**

The purpose and scope of the work is to revise and update the *Guidelines on the Application of General Principles of Food Hygiene to the Control of Viruses in Food (CXG 79-2012)*. CXG 79-2012 currently covers human enteric viruses, more specifically hepatitis A virus (HAV) and norovirus (NoV) and is applicable to all foods, with a focus on ready-to-eat food. It also contains two annexes for the control of HAV and NoV in specific commodities, one for bivalve molluscs (Annex I) and the other for fresh produce (Annex II). The revision will provide updated advice to competent authorities and food business operators on a framework for the control of human enteric viruses in food. The revision will be mainly based on the latest scientific advice from FAO/WHO. It will also include alignment of CXG 79-2012 with the revision of the *General Principles of Food Hygiene (CXC 1-1969)*.

**2. Relevance and timeliness**

Since the publication of CXG 79 in 2012, new scientific information for the control of viruses in food has been made available. Risk assessment models have been developed, including a quantitative risk model on NoV in bivalve molluscan shellfish. FAO/WHO published *Technical guidance for the development of the growing area aspects of Bivalve Mollusc Sanitation Programmes*<sup>5</sup>. There have been technical advancements in viral detection in specific commodities and in assessing potential infectivity of viruses, as well as new scientific findings on the use of indicators to monitor seawater quality of molluscs growing areas.

The Codex Committee on Food Hygiene (CCFH) requested the Joint FAO/WHO Expert Meeting on Microbiological Risk Assessment (JEMRA) to provide scientific advice on five areas:

1. An up-to-date review of the foodborne viruses and relevant food commodities of highest public health concern.
2. A review of the scientific evidence on prevention and intervention measures and the efficacy of interventions in the food continuum.
3. A review of the analytical methods for relevant enteric viruses in food commodities.
4. A review of scientific evidence on the potential utility of viral indicators or other indicators of contamination.
5. A review of the various risk assessment models with a view towards constructing more applicable models for wide use among member countries, including a simplified risk calculator.

The JEMRA meeting of viruses in foods, *Part 1: Food attribution, analytical methods and indicators* was held on September 18-22, 2023. A public call for data and experts was issued to support this work<sup>6</sup>. A summary of the conclusions of the meeting was published thereafter<sup>7</sup>. The full report will be published as part of the FAO/WHO Microbiological Risk Assessment (MRA) Series at a later date. A second JEMRA meeting of viruses in foods is planned for February 2024 to review the prevention and intervention measures, as well as the various risk assessment models.

The available information as well as the new scientific advice to be provided by FAO/WHO in 2024 highlights the need for and the timeliness of the revision of CXG 79-2012. While the fundamental principles in CXG 79-2012 are likely to remain the same, additional guidance based on new scientific information will help competent authorities and food business operators in the control of human enteric viruses in food to protect the health of consumers and ensure fair practices in food trade.

<sup>5</sup> FAO and WHO. 2021. Technical guidance for the development of the growing area aspects of Bivalve Mollusc Sanitation Programmes. Second edition. Food Safety and Quality Series No.5A. Rome. <https://doi.org/10.4060/cb5072en>

<sup>6</sup> FAO and WHO. Call for experts and data on microbiological risk assessment of viruses in foods. <https://www.fao.org/3/cc4295en/cc4295en.pdf>.

<sup>7</sup> FAO and WHO. [Joint FAO/WHO Expert Meeting on microbiological risk assessment of viruses in foods. Part 1: Food attribution, analytical methods, and indicators, Summary and conclusions, 2023](#)

### 3. Main aspects to be covered

The new work is intended to revise CXG 79-2012 to take into account the latest scientific information and will consider various aspects relevant to the control of viruses in foods, including:

- Expansion of the scope to address viruses other than HAV and NoV such as Hepatitis E viruses (HEV) and emerging vehicles of foodborne illnesses such as frozen fruits;
- Revision of interventions in the food chain focusing on process-specific control systems, surface disinfection as well as hand disinfection and food handler hygiene according to available evidence;
- Possible inclusion of additional information on testing of foods for foodborne viruses taking into account technical advancements in viral detection in specific food commodities and in assessing potential infectivity of viruses; and
- Consideration of new scientific findings to control HAV and NoV in bivalve molluscs and fresh produce made available since the publication of CXG 79-2012 including indicators to monitor seawater quality of molluscs growing areas and risk assessment models.

The expansion of the scope may result in the addition of an annex to provide additional recommendations for specific virus-commodity combinations (e.g., HEV in pork and game meat). The revision will also ensure alignment with the *General Principles of Food Hygiene* (CXC 1-1969) (revised in 2022).

### 4. An assessment against the *Criteria for establishment of work priorities*

#### General criterion

- **Consumer protection from the point of view of health, food safety, ensuring fair practices in the food trade and taking into account the identified needs of developing countries**

The proposed new work will support competent authorities and food business operators in implementing control measures to prevent or minimize the presence of human enteric viruses in food to reduce the risk of foodborne illness caused by viruses. The new work will consider the inclusion of measures to minimize the presence of zoonotic viruses i.e., HEV, a route of transmission not currently covered by CXG 79-2012.

#### Criteria applicable to general subjects

- **Diversification of national legislations and apparent resultant or potential impediments to international trade**

The revised CXG 79-2012 is expected to assist countries in adopting hygiene practices to reduce the risks of foodborne illness from viruses and to support international fair food trade practices.

- **Work already undertaken by other international organizations in this field and/or suggested by the relevant international intergovernmental body(ies)**

FAO/WHO has already initiated work on human enteric viruses in food, including the work of the WHO Foodborne Disease Burden Epidemiology Reference Group (FERG), which has included foodborne illnesses caused by viruses in its work plan.

- **Consideration of the global magnitude of the problem or issue**

Foodborne viral infections are very common in many parts of the world. Viruses differ in size, structure and biological characteristics from bacteria which can result in different management strategies compared to bacterial pathogens. A revision of CXG 79-2012, especially on newly identified foodborne viruses is key in supporting the reduction of the public health burden of foodborne viral infections.

### 5. Relevance to the Codex strategic objectives

The proposed new work directly relates to the following goals from the *Codex Strategic Plan 2020–2025*.

Goal 1: *Address current, emerging and critical issues in a timely manner*

The review and update of CXG 79-2012 are in response to new scientific information that can improve the control of viruses in food and in response to new information to be provided by FAO/WHO in 2024.

Goal 2: Develop standards based on science and Codex risk-analysis principles

Relevant reports from JEMRA meetings will inform the revision of CXG 79-2012. CXG 79-2012 will continue to provide risk analysis principles, implemented through food hygiene systems at multiple levels, to help reduce the risk of foodborne illness from viruses. During this review process, developments in recently available scientific information will be considered with input from member countries.

Goal 3: Increase impact through the recognition and use of Codex standards

The practical use of science-based Codex standards and related texts in food trade contributes to a high level of food safety. The revision of CXG 79-2012 should promote a better understanding and application of its principles internationally.

Goal 4: Facilitate the participation of all Codex Members throughout the standards setting process

The revision of CXG 79-2012 and participation will be open to all member countries interested in order to obtain constructive and relevant contributions.

Goal 5: Enhance work management systems and practices that support the efficient and effective achievement of all strategic plan goals

The consensus-driven review and update of CXG 79-2012 will be performed effectively and with transparency for timely adoption. Initial discussions are likely to take place through an electronic working group (EWG) to establish a framework in performing the update. Wide participation will be encouraged as free web-based technologies will be used. Translation of the latest versions of the texts into the official languages of the Commission will be performed ahead of the annual Committee meetings.

**6. Information on the relation between the proposal and other existing Codex documents as well as other ongoing work**

The review of CXG 79-2012 will continue to complement existing Codex texts. These include the *General Principles of Food Hygiene* (CXC 1-1969), the *Code of Practice for Fish and Fishery Products* (CXC 52-2003) and the *Code of Hygienic Practice for Fresh Fruits and Vegetables* (CXC 53-2003). The scope extension, to include additional virus-commodity combinations, could complement other Codex documents such as the *Code of Hygienic Practice for Meat* (CXC 58-2005). The ongoing work to align the Codex texts developed by CCFH with the revised *General Principles of Food Hygiene* (CXC 1-1969) will also be relevant for this review process. In addition, the *Guidelines for the Safe Use and Reuse of Water in Food Protection and Processing* (General Section and Annex I on Fresh Produce adopted at CAC46) as well as Annex II on Fishery Products (at Step 2/3), will also be considered for this review process.

**7. Identification of any requirement for and availability of expert scientific advice**

A first meeting of the *JEMRA of viruses in foods. Part 1: Food attribution, analytical methods and indicators* was held on September 18-22, 2023. A second JEMRA meeting of viruses in foods is planned for February 2024 to review the prevention and intervention measures, as well as the various risk assessment models. The summary reports and full reports of these two meetings will be necessary for the review and update of CXG 79-2012.

The report of the work on the alignment of CCFH documents with the revised *General Principles of Food Hygiene* (CXC 1-1969) will be taken into account for the review of CXG 79-2012.

**8. Identification of any need for technical input to the standard from external bodies so that this can be planned for**

Additional technical input from external bodies is not anticipated at this time.

**9. Proposed timeline for completion of the new work, including the start date, the proposed date for adoption at Step 5, and the proposed date for adoption by the Commission; the time frame for developing a standard should not normally exceed five years**

Provided acceptance of the work at CCFH54 in 2024, and subject to the Codex Alimentarius Commission (CAC) approval at its 47<sup>th</sup> Session in November 2024, the following timeline is proposed:

- Consideration at Step 4 by CCFH55

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- Re-consideration at Step 4 by CCFH56
  - Recommendation for adoption at Step 5/8 by CCFH57
  - Adoption by CAC the subsequent meeting.

The proposed timeline is provisional since the final publication date of the JEMRA report and the scheduling of CCFH55 is not known.