



Food and Agriculture
Organization of the
United Nations



World Health
Organization

Joint FAO/WHO Expert Meetings on Microbiological Risk Assessment (JEMRA)

CALL FOR DATA FOR MONITORING PROGRAMS FOR SHIGA TOXIN- PRODUCING *E. COLI* (STEC)

Deadline: 30 April, 2017

Background

Shiga toxin-producing *E. coli* (STEC) are an important cause of foodborne disease. Infections have been associated with a wide range of symptoms from mild intestinal discomfort to haemolytic uremic syndrome (HUS), end-stage renal disease (ESRD) and death. In its report on the global burden of foodborne disease, WHO estimated that foodborne STEC caused more than 1 million illnesses, 128 deaths, and nearly 13,000 DALYs in 2010¹.

The Codex Committee on Food Hygiene (CCFH) has discussed the issue of STEC in foods since its 45th Session and at the 47th Session, November 2015, it was agreed that it was an important issue to address (REP 16/FH, 2015). To facilitate this work, the CCFH requested FAO and WHO to develop a report compiling and synthesizing available relevant information, using existing reviews where possible, on the following aspects of STEC:

1. The global burden of disease and source attribution;
2. Hazard identification and characterization of STEC; and
3. Current monitoring and assurance programs including the status of the currently available methodology (commercially available and validated for regulatory purposes) for monitoring of STEC in food as a basis for management and control.

A meeting of a joint FAO/WHO Core Expert Group on Verotoxin-producing *E. coli* (VTEC)/STEC was held in Geneva, Switzerland, from 19-22 July, 2016. A meeting report² on the scope of the work and the approaches and the methodologies that may be used was developed and presented to the 48th session of CCFH in November, 2016.

As of now, 19 countries and regions responded to the previous call for data in 2016³ with great majority of data coming from North America and Europe, and less data from Asia, Latin America, and Africa. Information from additional countries is desirable in order to obtain a more global perspective.

On the monitoring and assurance programs, limited information was obtained from some regions. Also, the information received did not allow to assess how STEC monitoring program were implemented during

¹ World Health Organization, 2015. WHO estimates of the global burden of foodborne diseases Available at http://www.who.int/foodsafety/areas_work/foodborne-diseases/ferg/en/

² Joint FAO/WHO core expert group meeting on VTEC/STEC, Geneva Switzerland, 19-22 July, 2016 – Meeting report. Available at <http://www.fao.org/3/a-bq529e.pdf> and http://www.who.int/foodsafety/areas_work/microbiological-risks/JEMRA-report.pdf?ua=1

³ Call for data on VTEC/STEC. Available at <http://www.fao.org/3/a-bl019e.pdf>

processing (e.g. in abattoirs as part of the GHPs/HACCP) or whether the monitoring programs were mandatory (enforced by competent authorities) or not (industry voluntary programs).

Objectives

The data will serve as inputs to the development of scientific advice which will guide the elaboration of appropriate Codex texts. This call is supplemental to the earlier calls issued earlier in 2016 and is being reissued for additional information to obtain more globally representative data on monitoring programs for STEC.

Request for relevant information

FAO and WHO want to ensure that all available and relevant information/data are collected, and are requesting governments, the food industry, academia, consumer groups, laboratories, health care providers and any other interested organizations and individuals to submit any available data from public health surveillance and assurance programs for STEC. These data may be published or unpublished. Reference should be made to related published studies, where applicable.

FAO and WHO also recognize that countries may be at different levels in the development of their monitoring programs and testing methods for STEC and welcome information on the status including challenges encountered.

Deadline for submission of data

Please submit the attached forms (Questionnaire 1 and 2) by **30 April 2017** with supporting documents in any format (electronic and/or hard copies - electronic submissions are preferred, either via e-mail (if not too large) or on USB keys), in any official United Nations (UN) language (English, French, Spanish, Arabic, Chinese, Russian), and with a title and short description of the content in English along with the list of data and information requirements if possible, to jemra@fao.org and jemra@who.int. If information is not available in an official UN languages, a short summary of the nature of the data should be provided, preferably in English.

The form (questionnaires 1 and 2) can be found at: <http://www.fao.org/3/contents/29c6f5b5-3ce9-4765-bfd0-b6dd76df3664>.

FAO and WHO thank countries that submitted data on monitoring programs for the previous call for data and would like to indicate that responses are expected from all the countries for this call since significant new information is requested.

Confidential and/or unpublished data

FAO and WHO recognize that some of the information and relevant data which are now required may be unpublished or of a confidential nature. With regard to unpublished information and data, this remains the property of the author for subsequent publication by the owner as original material. Unpublished confidential studies that are submitted will be safeguarded in so far as it is possible to do so without compromising the work of FAO and WHO. Specific issues relating to confidentiality should be discussed directly between the information and data owners and FAO/WHO. For these and other issues please contact FAO and WHO at the contacts provided.

Correspondence

For more information, please contact Dr Blaise Ouattara (FAO) or Dr Rei Nakagawa (WHO).

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Annex 1: Guidance for recording the data/information

This annex provides details on the type of information/data requested. Please note that the first row of questionnaire 1 and the first four rows of questionnaire 2 have been pre-filled only to provide concrete examples. Do not hesitate to email jemra@fao.org or jemra@who.int if you have questions or need more clarification.

Questionnaire 1

1. **Country:** Provide the name of your country (ex. Argentina, Canada, France, India).
2. **Program name:** Provide the name of the control program (ex. HACCP verification, Hazard analysis verification).
3. **Commodity:** Please specify the commodity (e.g. Beef, pork, poultry, fresh vegetable).
4. **Description:** Provide a brief description of the control program including purpose (e.g. mandatory, market access, voluntary).
5. **Part of Good Hygienic Practices/Pre-requisite or HACCP:** Please indicate if the control program is part of the establishment GHPs/Pre-requisite or HACCP.
6. **Target organisms:** Please indicate if the testing is only for the control of STEC or if it is part of controlling all foodborne pathogens.
7. **Observations/Challenges:** we are interested to know any challenge in the design and implementation of control programs of STEC within your GHPs/Pre-requisite or HACCP.
8. **Additional information:** : Please provide additional information about your control program in any format (**references/Link/attached document**).

Questionnaire 2

1. **Country** - Provide the name of your country (ex. Argentina, Canada, France, India).
2. **Sampling/testing plan** - Provide the name of the control program (ex. National monitoring program-M201).
3. **Commodity** – Please specify the commodity (e.g. Beef, pork, poultry, fresh vegetable).
4. **Step in the food chain** – Indicate where the sampling is applied in the processing chain (e.g. abattoir, processing of vegetables, retail, etc).
5. **Purpose of the testing** – Please provide the main purpose of this the testing program (e.g. domestic market, testing of imported products, testing for exportation (indicate the country where the product is exported to), testing to determine national baseline prevalence, targeted exploratory etc.).
6. **Regulatory testing** – Testing programs can be mandatory i.e. imposed by the competent authorities or non-mandatory (ex. Industry own testing programs). For each testing program, please indicate if they are mandated by competent authorities or not, and for regulatory testing if they are implemented by the competent authorities or by industry.
7. **Target organisms** – e.g. O157:H7/NM, non-O157, other pathogens (*Salmonella*, *Listeria monocytogenes*, etc.).
8. **Lab method for screening/confirmation** – Provide the laboratory method(s) for isolation and confirmation of STEC (e.g. for Canada, MFLP-30 for screening and MFHPB-10 for confirmation)
9. **Analytical sample size** – If available, provide the size (g or ml) of the analytical sample size (e.g. for Canada, for sampling plan M201-Domestic testing for raw ground beef, the analytical sample size is 325 g (5 subsample of 65g).

10. **Number of samples per sampling period or per year** – If available, provide the number of the samples for each year or each sampling period (e.g. 1000 samples).
11. **Action taken on positive samples** – Provide information on actions taken by competent authorities on positive samples for STEC (e.g. recall, corrective actions, etc.)
12. **Additional information:** Please provide additional information about your testing programs for in any format (**References/Link/attached document**).
13. **Observations/Challenges:** we are interested to know any challenge in the design and implementation of your monitoring and testing programs for STEC.