



European Community Reference Laboratory for monitoring
bacteriological and viral contamination of bivalve molluscs



CEFAS Laboratory, Weymouth, Dorset, DT4 8UB, UK

WORK PROGRAMME FOR THE EURL FOR BACTERIOLOGICAL AND VIRAL CONTAMINATION OF BIVALVE MOLLUSCS, 2011

LEGAL FUNCTIONS AND DUTIES

The functions and duties of the EURL are specified in Article 32 of Regulation (EC) No 882/2004 (Official Journal of the European Communities No L 165 of 30.4.2004).

In the 2011 work programme year 27 Member States and 3 candidate countries (Croatia, Turkey and Republic of Macedonia) are considered eligible for EURL assistance and invited to participate in EURL organised training programmes, comparative testing etc. The full integration into the European Union of recent accession Member States continues to be a priority area, and is facilitated via the provision of additional advice, training and assistance.

WORK PROGRAMME, 2011

Duration

1. Scientific advice and support

1.1. Assist DG Sanco in functioning and implementation of Community food hygiene legislation, in particular in 2011: 50 days

- Consideration of equivalence of US FDA and EU hygiene standards for live bivalve molluscs (LBM).
- Recommendations on harmonisation of standards for class A shellfish and end products in EU hygiene legislation with CODEX standards for LBM.
- Consideration of validation of alternative methods in legislation.
- Considerations of intensive purification for LBM harvested from class C areas.

And any other activities as required.

1.2. Participate in relevant EU and International scientific committees (ISO/CEN, WHO/FAO, ICMSS etc). In 2011 the CRL will: 40 days

- Chair and co-ordinate the activities of the CEN/TC 275/WG6/TAG4 developing a CEN standard for detection of norovirus and hepatitis A in foodstuffs, including bivalve molluscs.
- Lead and co-ordinate the activities of CEN/TC 275/WG6/TAG3 in the elaboration of molecular based enumeration methods for pathogenic marine vibrios in bivalve shellfish.



- Lead the revision of the EU reference method for enumeration of *E. coli* in LBM for official control (ISO TS 16649-3) to establish the method as a full standard.
 - Project leader for the revision of the ISO 6887 series part 3 initial preparation and dilutions for aspects of microbiology associated with LBM.
 - Jointly lead the revision of ISO TS 21872-1 and 2 detection of *Vibrio* spp. in seafood.
 - Participate in ISO/TC34/SC9/WG3 working group on validation of methods (revision of EN ISO 16140).
- 1.3. Contribute to the joint FAO/WHO expert group on risk assessment tools for *Vibrio parahaemolyticus* and *V. vulnificus* associated with seafood. 10 days
- 1.4. Contribute to EFSA expert working group on foodborne viruses considering control options for viruses in LBM, to include risk based approaches, virus standards, improvements in water quality, environmental legislation and improved depuration. 15 days
- 1.5. Assist DG Sanco with specialist assistance in relation to food and veterinary inspections of Member States, Accession Countries and Third Countries as they arise. 10 days
- 1.6. Co-operate with, and assist DG TAIEX in the provision of training and advice to Accession Countries as required. 4 days
- 1.7. Undertake EURL missions in support of the above activities.
- During 2011 missions are foreseen in relation to the annual meetings of ISO and CEN (1 mission) the CEN/TAG4 working group on viruses in food (1 mission); CEN/TAG3 working group on vibrios (1 missions); ISO/WG3 working group on validation of methods (2 missions) and up to 6 missions in support of NRLs and DG Sanco activities (items 1.1 and 1.2). Up to a maximum of 30 days
 - Mission associated with the joint EU/US FDA workshop on implementation and approaches to sanitary surveys (item 2.5). Included in above
 - Mission to JRC/IRMM Geel, Belgium (item 3.4) 3 days



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- 1.8. Organise an annual review meeting between EURL representatives and designated DG SANCO representative in the area in Brussels or mutually convenient location. 5 days
 - 1.9. Participation in relevant international scientific conferences. In 2011 it is foreseen that the EURL will present scientific research at the ICMSS conference in PEI, Canada, Health Related Water Microbiology, New Zealand. 10 days
- 2. Co-ordination of activities of NRL network and provision of technical assistance and training**
- 2.1. Participate in annual EURL Director's co-ordination meeting and other EURL co-ordination meetings/workshops as appropriate. 5 days
 - 2.2. Organise, host, and participate in the tenth annual EURL workshop, produce resolutions and other workshop outputs (May 2011, EURL Weymouth). To include administrative assistance. 40 days
 - 2.3. Undertake EURL activities and commitments agreed in resolutions at annual workshops (as posted on www.crlcefas.org). Up to 50 days
 - 2.4. Produce web-based information and guidance on application of sanitary surveys - in accordance with the requirements of 854/2004 on official controls. 4 days
 - 2.5. In collaboration with the US FDA organise and participate in the second joint workshop on implementation and approaches to sanitary surveys in the EU and US. 15 days
 - 2.6. Supply specialist information and advice on bacteriological and viral methods to NRLs (particularly new MS NRLs and accession countries), Official Control testing laboratories, and third country laboratories. To include assistance on implementation of methods, accreditation to IEC ISO17025, validation of alternative methods according to ISO16140, provision of EURL SOPs and transfer of other technical information. Up to 6 days
 - 2.7. Provide specialist training and/or training courses to NRLs, accession country NRLs and others in relation to analyses of *E.coli*, *Salmonella* spp., *Vibrio* spp., FRNA bacteriophage, Norovirus, hepatitis A virus and other aspects of bivalve shellfish hygiene as required. 5 days
 - 2.8. Revise the EURL website (www.crlcefas.org) to ensure it is an effective means of dissemination of information to NRLs and other stakeholders. 10 days



3 Ring trials, comparative testing and quality assurance

- 3.1 Organise comparative (proficiency) testing for NRLs for *E.coli* and *Salmonella* spp. in bivalve molluscs via the EURL/HPA shellfish EQA scheme. Analyse results, produce report, advice and recommendations (by May 2011). 26 days
- 3.2 Organise norovirus and hepatitis A ring trials, in 2011 for both laboratory constructed and LBM matrix samples for quantitative and qualitative analyses. Analyse results, produce report and recommendations (by May 2011). 70 days
- 3.3 Undertake *Vibrio* spp. ring trials to assist in the elaboration of methods enabling detection/enumeration of human pathogenic *Vibrio* spp. associated with LBM. Analyse results, produce report and recommendations (by May 2011). Included in item 5.2
- 3.4 In collaboration with JRC/IRMM Geel continue studies on the production of norovirus reference material using freeze-dried matrix samples. 30 days

4 Confirmatory testing

- 4.1 Maintenance of EURL laboratory competence and expertise on analytical methods for monitoring virological contaminants of bivalve molluscs (Norovirus and hepatitis A virus). 30 days
- 4.2 Re-accreditation to IEC ISO 17025 of the CEN method for detection of norovirus in bivalve shellfish. 30 days
- 4.3 Maintenance of EURL laboratory competence and expertise on analytical methods for monitoring bacteriological contaminants of bivalve molluscs (*E.coli*, *Salmonella* spp., FRNA bacteriophage, marine vibrios). To include maintenance of IEC ISO 17025 accreditation of enumeration of *E. coli*, and the detection of *Salmonella* spp. and *Vibrio parahaemolyticus*. 50 days
- 4.4 Contribution to costs of the maintenance of EURL capability to perform analysis for human pathogenic strains of marine vibrios associated with LBM (e.g. serotyping *V. parahaemolyticus*, molecular characterisation of pathogenic strains of *V. parahaemolyticus*, *V. vulnificus* and non01/0139 *V. cholerae*). 10 days
- 4.4 Performance of above tests on outbreak material or on occasion of disputed test results (on request of DG Sanco). Included in above



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5 Development of analytical methods (undertaken at EURL)

- 5.1 Contribution as the project leader towards the validation of the TAG4 reference method for the detection of viruses in food (CEN/TC 275/WG6/TAG4). 10 days

Note. Validation of the TAG4 reference method for viruses in foods, including bivalve shellfish is a priority area. The deadline for a decision on funding of M/381 for full validation is September 30th 2010.

- 5.2 Contribution as the project leader towards the elaboration and validation of the TAG3 molecular based standard for the detection of potentially pathogenic vibrios in foodstuff, including bivalve shellfish using molecular methods to include in 2011: 60 days

- Evaluation of a direct extraction and detection of *V. parahaemolyticus* and *V. vulnificus* in artificially and naturally contaminated samples.
- Performance characterisation of above method to evaluate linearity, limit of detection, limit of quantitation and repeatability.
- Limited comparative testing amongst NRLs with expertise in testing LBM for *Vibrio* spp. to examine method reproducibility and inform methodology development.
- Evaluation of PCR targets for inclusion in the revision of ISO TS 21872- parts 1 and 2 to enable the inclusion of a molecular confirmation step for vibrios of human pathogenic significance.

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