FRAMEWORK PARTNERSHIP AGREEMENT

RISK CHARACTERIZATION OF CIGUATERA FOOD POISONING IN EUROPE

60th MEETING OF THE EFSA ADVISORY FORUM
8-9 JUNIO UTRECHT

efsa European Food Safety Authority

UNIVERSIDADE DE VIGO

Instituto de Salud Carlos III

IRTA RECERCA I TECNOLOGIA AGROALIMENTÀRIES

UNIVERSIDAD DE LAS PALMAS DE GRAN CANARIA

Servicio Canario de Salud

BfR Bundesinstitut für Risikobewertung

ASAE Autoridade de Segurança Alimentar e Económica

Instituto_Nacional de Saúde Doutor Ricardo Jorge

ipma

ARISTOTLE UNIVERSITY OF THESSALONIKI

STATE GENERAL LABORATORY

University of Thessaly

Ifremer

CIGUATERA CFP: CIGUATERA FISH POISONING.

-The most severe poisoning related with marine toxins in seafood (50 000 to 200 000 people affected yearly). (only 5-10% reported)

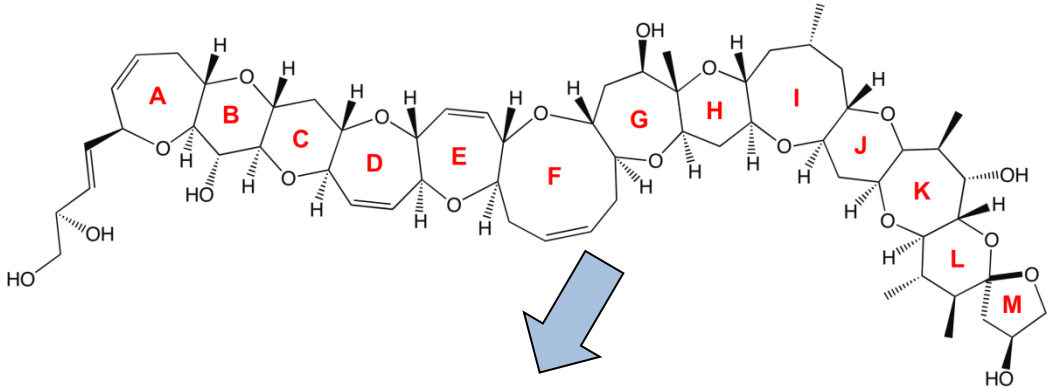
-Mainly in inter-tropical latitudes. Increasing incidence in non-endemic

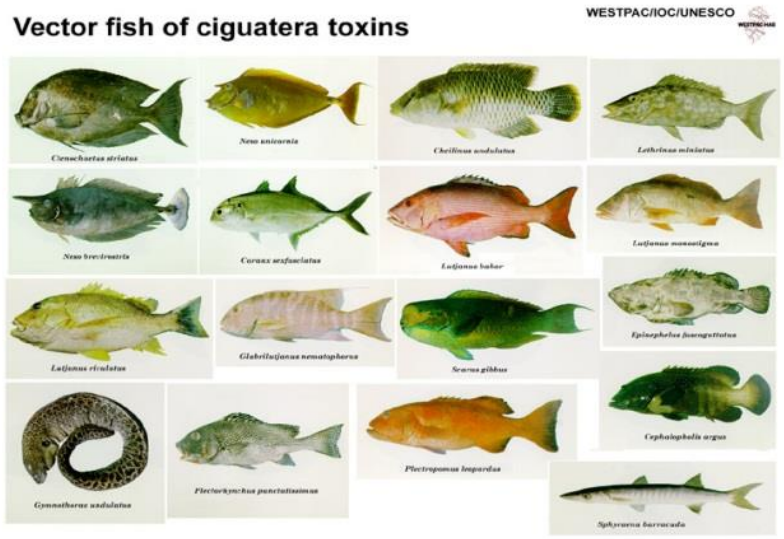
-Regulation does not set limits nor an official method.

-Lack of a harmonized, validated detection method.

CIGUATOXINS: Cyclic polyether toxins, produced by dinoflagellates (Gambierdiscus sp) and responsible for symptoms of ciguatera poisoning.

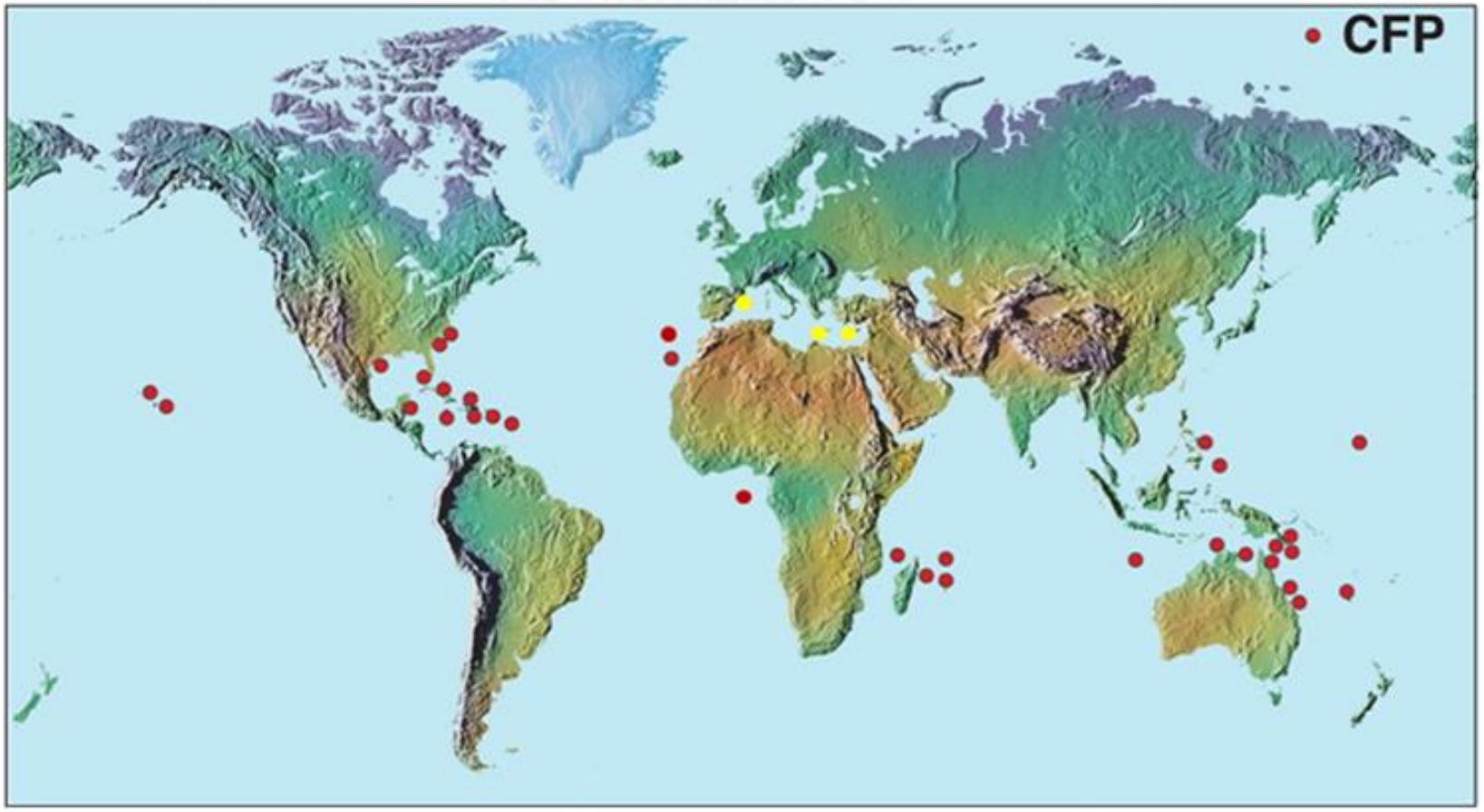
http://pn.bmj.com/content/7/5/316.full





http://www.whoi.edu/science/B/redtide/species/cfp_vectorfish.jpg

WORLDWIDE DISTRIBUTION of Ciguatera cases of poisoning (Red dots) including episodes in the Western Atlantic, Macaronesia (Canary Islands and Madeira). Additionally, only for the Mediterranean, this maps reports (Yellow dots) presence of *Gambierdiscus* spp. in Cyprus, Crete and the Balearic Islands. There is no thorough evidence of Ciguatera poisoning in the Mediterranean.



FIRST RECORDS OF OUTBREAKS IN EU

- Canary Islands: 2004 – Amberjack (Seriola rivoliana) 26 kg : 9 people affected

- Madeira : 2008; Amberjack (Seriola rivoliana) 30 kg : 16 people affected

Background

Ciguatera outbreaks due to autochthonous fish in the European Union: Spain

Date	Place	No. of Cases	Type of fish	Size (kg)	Fish origen	Ctx detection
Nov 2008	Tenerife	25	*Seriola fasciata*	37	Local market	Yes
Jan 2009	Tenerife	4	*Seriola dumerilis*	67	Sport fishing	Yes
Sep 2009	Gran Canaria	3	*Seriola spp.*	UNK	UNK	
Nov 2009	Tenerife	2	*Seriola spp.*	UNK	Sport fishing	
Apr 2010	Tenerife	6	*Seriola spp.*	80	UNK	
Jun 2011	Gran Canaria	5	*Seriola spp.*	24	Sport fishing	Yes
Jan 2012	Lanzarote	10	*Seriola spp.*	15	Sport fishing	
Apr 2012	Lanzarote	9	*Seriola spp.*	26	Sport fishing	
May 2012	Tenerife	4	*Seriola spp.*	UNK	Local market	
Dec 2012	Tenerife	12	*Epinephelus spp.*	18	Sport fishing	Yes
Dec 2013	Lanzarote	16	*Epinephelus spp.*	UNK	Local market	Yes
Feb 2015	Tenerife	3	*Mycteroperca fusca*	3-4	Local market	
Apr 2015	Tenerife	3	UNK	UNK	UNK	
May 2015	Tenerife	2	*Pamatomus saltatriz*	<10	Sport fishing	Yes

SANITARY CONTROL MEASURES APPLIED IN THE CANARY ISLANDS BECAUSE OF THE EMERGING PRESENCE OF CIGUATOXIN

- **MANDATORY NOTIFICATION OF CIGUATERA** On the basis of the higher incidence of Ciguatera food poisoning in Canary Islands : Annex III amendment of Decree 165/1998 (Canaries Epidemiological Surveillance Network)

General Directorate of Fisheries
Canary Islands Government

⟺

General directorate of Public Health
Canary Islands Government

- **OFFICIAL CONTROL PROGRAMME (started 2009)**
- **ACTION SCOPE: First selling points, food enterprises and restaurants.**
- **MEETINGS WITH SPORT FISHING ASSOCIATIONS**

AUTOCHTONOUS CIGUATERA OUTBREAKS IN THE EU: SPAIN AND PORTUGAL

ELSEVIER
Contents lists available at ScienceDirect
Toxicon
journal homepage: www.elsevier.com/locate/toxicon

Short communication

Ciguatera fish poisoning on the West Africa Coast: An emerging risk in the Canary Islands (Spain)

Luis D. Boada [a,*], Manuel Zumbado [a], Octavio P. Luzardo [a], Maira Almeida-González [a], Steven M. Plakas [b], Hudson R. Granade [b], Ann Abraham [b], Edward L.E. Jester [b], Robert W. Dickey [b]

RAPID COMMUNICATIONS

Outbreak of ciguatera food poisoning by consumption of amberjack (*Seriola* spp.) in the Canary Islands, May 2012

D Nuñez (dnungal@gobiernodecanarias.org)[1], P Matute[1], A Garcia[1], P Garcia[1], N Abadía[1]
1. Servicio de Epidemiología y Prevención, Dirección General de Salud Pública, Servicio Canario de la Salud, Canary Islands, Spain

Citation style for this article:
Nuñez D, Matute P, Garcia A, Garcia P, Abadía N. Outbreak of ciguatera food poisoning by consumption of amberjack (Seriola spp.) in the Canary Islands, May 2012. Euro Surveill. 2012;17(23):pii=20188. Available online: http://www.eurosurveillance.org/ViewArticle.aspx?ArticleId=20188

Article submitted on 18 May 2012 / published on 7 June 2012

TABLE 2
Outbreaks (n=9) and number of cases (n=68) of ciguatera food poisoning, Canary Islands, Spain 2008–2012

Outbreak number	Date	Island	Number of human cases	Fish species	Weigth (kg)	Origin
1	15/11/2008	Tenerife	25	Amberjack (*Seriola fasciata*)	37	Local market
2	29/01/2009	Tenerife	4	Amberjack (*Seriola dumerilis*)	67	Sport fishing
3	03/09/2009	Gran Canaria	3	Amberjack (*Seriola* spp.)	Unknown	Unknown
4	19/11/2009	Tenerife	2	Amberjack (*Seriola* spp.)	Unknown	Sport fishing
5	24/04/2010	Tenerife	6	Amberjack (*Seriola* spp.)	80	Unknown
6	26/06/2011	Gran Canaria	5	Amberjack (*Seriola* spp.)	24	Sport fishing
7	28/01/2012	Lanzarote	10	Amberjack (*Seriola* spp.)	15	Sport fishing
8	04/04/2012	Lanzarote	9	Amberjack (*Seriola* spp.)	26	Sport fishing
9	05/2012	Tenerife	4	Amberjack (*Seriola* spp.)	Unknown	Local market

Revista Portuguesa de Saúde Pública
Volume 29, Issue 1, January–June 2011, Pages 77–87

Biotoxinas emergentes em águas europeias e novos riscos para a saúde pública

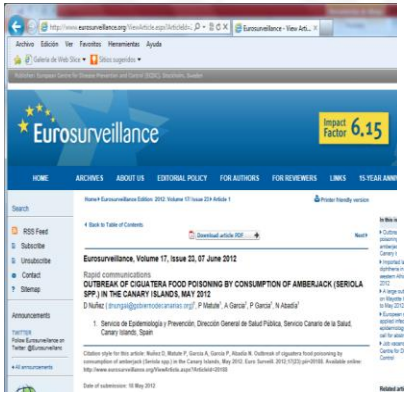
Emergent biotoxins in European waters and new public health risks

Paulo Vale
Instituto Nacional de Recursos Biológicos, I.P. – Instituto de Investigação das Pescas e do Mar, Lisboa, Portugal

Amberjack

Rev Port Saúde Pública. 2011;**29(1)**:77-87

ELSEVIER DOYMA
Revista portuguesa de saúde pública
www.elsevier.pt/rpsp



Artigo original

Biotoxinas emergentes em águas europeias e novos riscos para a saúde pública

Paulo Vale
Instituto Nacional de Recursos Biológicos, I.P. – Instituto de Investigação das Pescas e do Mar, Lisboa, Portugal

Ciguatera cases in European Union travellers

J Travel Med. 2001 May-Jun;8(3):139-42.

Ciguatera fish poisoning: an emerging syndrome in Italian travelers.

Bavastrelli M[1], Bertucci P, Midulla M, Giardini O, Sanguigni S.

Medicina Clínica

Vol. *120*. Núm. *20*. 31 Mayo 2003
Documento Anterior - Documento Siguiente

Intoxicación por ciguatoxina en viajeros

Ciguatera poisoning in Spanish travellers

Joaquim Gascón [a], Maria Macià [a], Inés Oliveira [a], Manuel Corachán [a]

[a] Sección de Medicina Tropical. Centro de Salud Internacional. Hospital Clínic. IDIBAPS. Barcelona. España.

Ciguatera outbreaks due to imported fish in the European Union

bulletin épidémiologique hebdomadaire
BEH
RÉPUBLIQUE FRANÇAISE
Ministère de l'Emploi
et de la Solidarité
INSTITUT DE VEILLE SANITAIRE
L'utilisation de stylos injecteurs par les soignants, une pratique à risque d'exposition au sang p. 185
Intoxication alimentaire à la ciguatera p. 187
N° 38/2001
18 septembre 2001

INTOXICATION ALIMENTAIRE À LA CIGUATERA : SAVOIR L'ÉVOQUER MÊME EN L'ABSENCE DE VOYAGE

Vaillant V.[1], Caumes E.[2], De Valk H.[1], Mesnage V.[3] , Griffon AM.[4].

ELSEVIER
Toxicon
Volume 91, 1 December 2014, Pages 76–83
Special Issue: Freshwater and Marine Toxins

Ciguatera fish poisoning: A first epidemic in Germany highlights an increasing risk for European countries

César Mattei[a], Irina Vetter[b], Anneka Eisenblätter[c], Bernd Krock[d], Martin Ebbecke[e], Herbert Desel[e], Katharina Zimmermann[c]

CIGUATERA POISONING AN EMERGING RISK IN THE EU

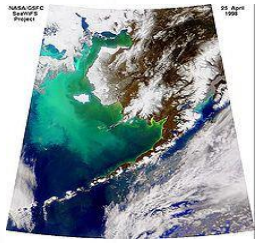
-Madeira and Canary Islands (Macaronesia):

- -Presence of *Gambierdiscus* spp.
- -Fish with CTXs.
- -CFP reported.

- Mediterranean Sea:

- -Presence of *Gambierdiscus* spp.

-Reported cases in hospitals in continental Europe (EU citizens travelling to ciguatera endemic / Imported fish with CTXs).



Climatic changes

Fisheries activity

Oversea Traffic increase

International trade

WHICH ARE THE NEEDS????

efsa European Food Safety Authority

EFSA Journal 2010; 8(6):1627
Emerging toxins: Ciguatoxin group. EFSA Journal 2010; 8(6):1627. [38 pp.].

- ✓ Certified reference standards and reference materials are needed
- ✓ Methods other than the Mouse Bioassay should be further developed, optimised and validated
- ✓ More information on occurrence in fish and other seafood is needed
- ✓ Due to their high acute toxicity and emerging occurrence, appropriate strategies to protect human health need to be developed
- ✓ Further information to better characterise the oral toxicity and relative potencies is needed

Detection of Gambierdiscus

↓

CFP Outbreaks

↓

Raised at AF 2010 - Discussed by EREN in 2012

↓

Spain expressed the need to characterize ciguatera food poisoning in Europe.
13th EREN network meeting (April 2015)

↓

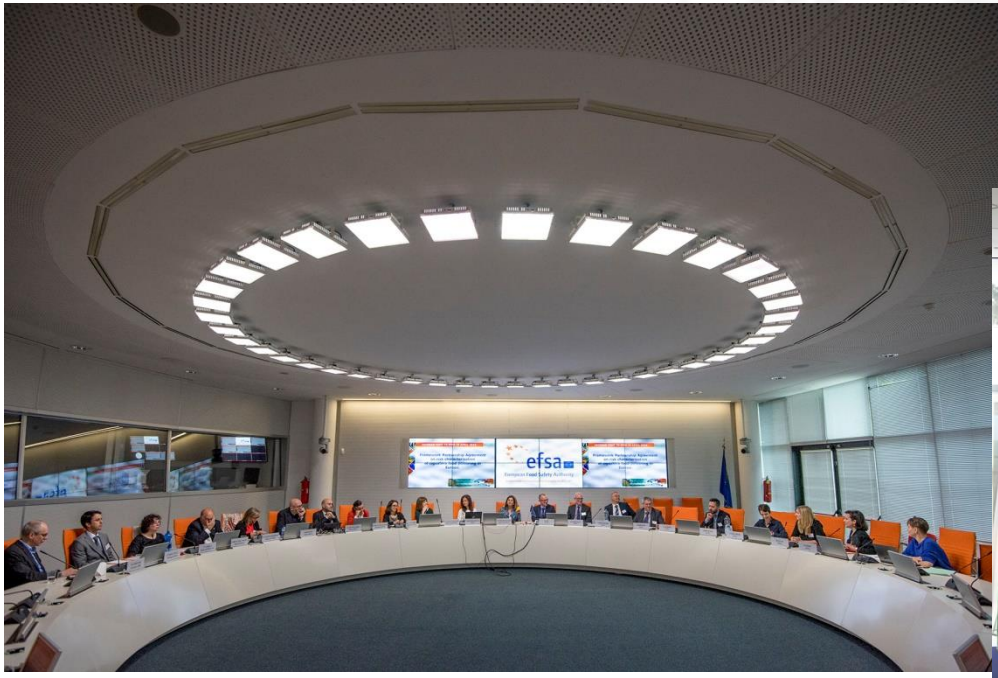
Proposal of a project made by issue was discussed the Spanish Agency for Consumer Affairs, Food Safety and Nutrition (AECOSAN) to EFSA in May 2015

↓

SIGNATURE OF THE FRAMEWORK PARTNERSHIP AGREEMENT 19 MAY 2016

Signature in Parma, 19th of April 2016

EFSA´S FRAMEWORK PARTNERSHIP AGREEMENT
RISK CHARACTERIZATION OF CIGUATERA FOOD POISONING IN EUROPE
NUMBER: GP/EFSA/AFSCO/2015/03



RISK CHARACTERIZATION OF CIGUATERA FOOD POISONING IN EUROPE

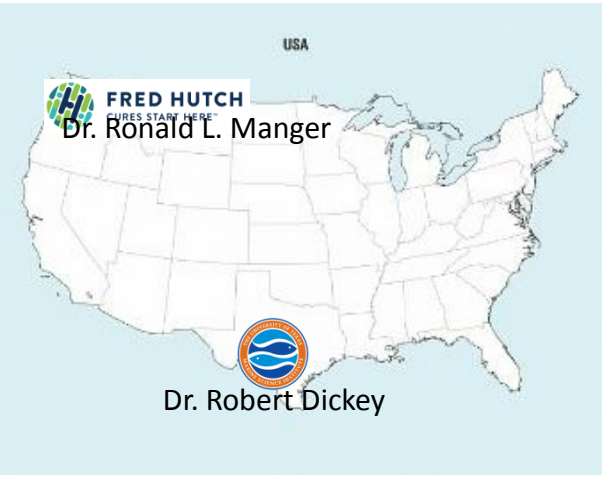
- Determination of the incidence and epidemiological characteristics of ciguatera cases in Europe
- Investigate the spatial and temporal distribution of *Gambierdiscus* spp. in EU waters
- Evaluate the CTX-like toxicity of *Gambierdiscus* spp. Populations;
- Evaluate possible presence of CTXs in fish in EU waters
- Establish a reliable methodological approach to identify and quantify ciguatoxins (CTXs) in fish and microalgae;
- Develop standards and reference material

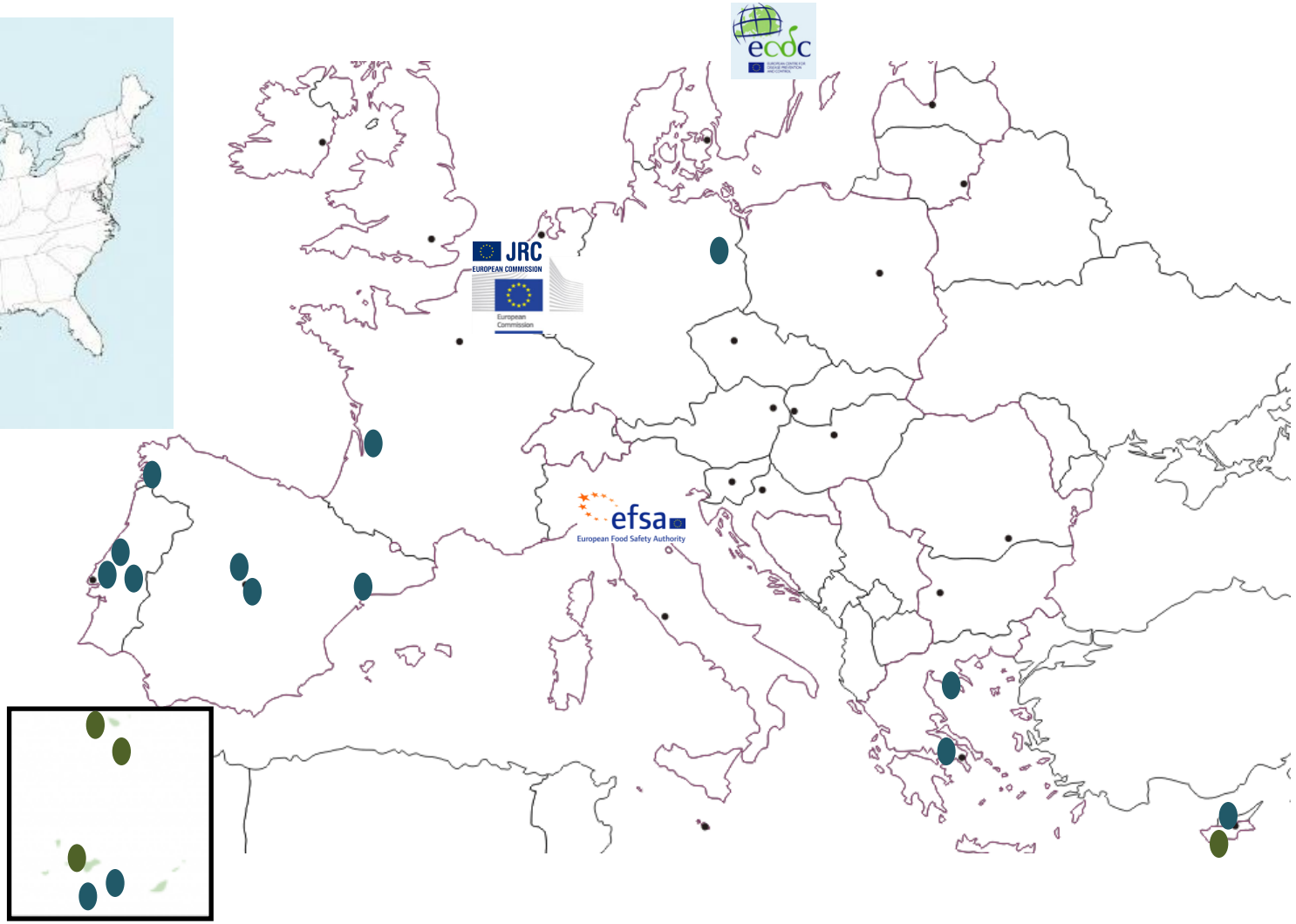
PARTNERS, COLLABORATORS AND OTHERS

	Organisation	Acronym
Coordinator	Agencia Española de Consumo, Seguridad Alimentaria y Nutrición	AECOSAN
Partner 1	Instituto de Salud Carlos III	ISCIII
Partner 2	Institut de Recerca i Tecnologia Agroalimentaries	IRTA
Partner 3	Universidad de Vigo	UVigo
Partner 4	Portuguese Authority for Food and Economic Safety	ASAE
Partner 5	Instituto Nacional de Saúde Doutor Ricardo Jorge, I.P.	
Partner 6	University of Thessaly	
Partner 7	Federal Institute for Risk Assessment	BfR
Partner 8	Canary Health Service (Servicio Canario de la Salud)	SCS
Partner 9	Universidad de Las Palmas de Gran Canaria	ULPGC
Partner 10	Instituto Português do Mar e da Atmosfera	IPMA
Partner 11	State General Laboratory (SGL) / Ministry of Health	SGL
Partner 12	French Research Institute for Exploitation of the Sea	IFREMER
Partner 13	Aristotle University of Thessaloniki	

PARTNERS, COLLABORATORS AND OTHERS

Collaborator	Ministry of Health, Nicosia Cyprus
	Regional Ministry of Agriculture, Livestock, Fisheries and Water the Canary Islands Government
	Natural Park of Madeira
	Direção Regional das Pescas of Madeira
Advisory Board	Dr. Ronald L. Manger Fred Hutchinson Cancer Research Ctr, Seattle, WA
	Dr. Robert Dickey Marine Science Institute (UTMSI), Austin Texas
	Dr. Takeshi Yasumoto JFRL, Japan
	EFSA
	ECDC
	COM
	JRC





PARTNERS, COLLABORATORS AND ADVISORY BOARD

FRAMEWORK PARTNERSHIP AGREEMENT NUMBER: GP/EFSA/AFSCO/2016

Risk characterization of ciguatera food poisoning in Europe

AECOSAN : FPA leader and coordinator.

- **SPECIFIC AGREEMENT NUMBER 1 : MANAGEMENT AND SCIENTIFIC COORDINATION**
- **SPECIFIC AGREEMENT NUMBER 2 :DETERMINATION OF THE INCIDENCE AND EPIDEMIOLOGICAL CHARACTERISTICS OF CIGUATERA CASES IN EUROPE**
- **SPECIFIC AGREEMENT NUMBER 3: EVALUATION OF CTXs IN SEAFOOD AND THE ENVIRONMENT AND OBTENTION OF REFERENCE MATERIAL**
- **SPECIFIC AGREEMENT NUMBER 4 : CHARACTERIZATION OF CIGUATOXINS PRESENT IN EU CONTAMINATED PROFILES BY LC_MS/MS and HRMS: DEVELOPMENT OF STANDARDS AND SECONDARY REFERENCE MATERIALS**

Instituto de Salud Carlos III

IRTA RECERCA I TECNOLOGIA AGROALIMENTÀRIES

UNIVERSIDADE DE VIGO

GOVERNANCE

Governing Board (Management and Scientific): AECOSAN + All the partners

This board will work as an Executive committee, representing the interests of all the specific partners leading the SG, but presided by AECOSAN which will be the ultimately institution taking decisions. The board will deal with both scientific and management issues affecting the project and the different contracts.

Advisory Board: AECOSAN, Dr. Ronald L. Manger (Fred Hutchinson Cancer Research Ctr, Seattle, WA), Dr Robert Dickey (Marine Science Institute (UTMSI), Austin Texas) and Dr. Takeshi Yasumoto (JFRL, Japan), EFSA (Observer), ECDC, COM and JRC.

JRC EUROPEAN COMMISSION

ecdc EUROPEAN CENTRE FOR DISEASE PREVENTION AND CONTROL

European Commission

efsa European Food Safety Authority

SA 1: MANAGEMENT AND SCIENTIFIC COORDINATION

PARTNERS: AECOSAN, ASAE

MAIN TASKS

- To facilitate **cooperation and scientific advancement** of all four Specific Agreements foreseen;
- **Favour scientific cooperation** among partners within the Governing Board and facilitate interchange of information with the Advisory Board;
- **Ensure scientific coherence and data integration** among all four Specific Agreements;
- **Integrate the different results** of the specific agreements in order to provide EFSA with the main goals of the FPA in terms of the risk characterization of the Ciguatoxin poisoning in the EU;

EXTERNAL COMUNICATION PLAN: ECP

TO WHO?

- Operators
- Sport fishing associations
- Food safety competent authorities
- Sanitary competent authorities
- Consumers
- Scientific community
- Advisory forum
- EFSA´s panels and SC

ASAE Autoridade de Segurança Alimentar e Económica

HOW

- Webpage
- Flyers
- Seminars/workshops/meetings
- Interactions with other projects/ initiatives

Surveys; Awareness campaigns; Flyers; Web & Social Networks

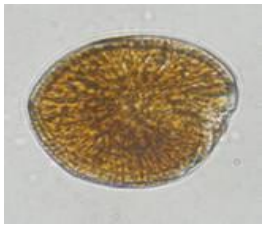
SA3: Evaluation of CTXs in seafood and the environment for the risk assessment of ciguatera fish poisoning

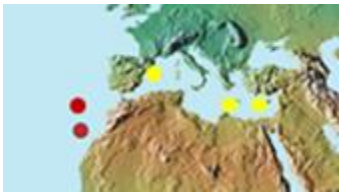
MAIN TASKS:

- **Isolation of *Gambierdiscus* spp. from EU waters:** Madeira, Canary Islands, Crete, Cyprus, Balearic Islands and toxicity evaluation;; Species identification; Isolation and culturing of microalgae for Toxicity evaluation (by cell-based assay, CBA) and large-scale culture of the most interesting toxicogenic strains.
- **Evaluation of CTXs in fish for human consumption,** from EU waters: from Macaronesian islands and the Mediterranean Sea (Canary Islands Madeira, Crete, Cyprus and Balearic Islands). Collection of fish samples from the field and from the market (muscle and liver if available), toxicity evaluation by CBA and confirmation by LC-MS/MS in collaboration with Grant 4.
- **Development of primary reference material (Linked to Grant 4);** screening of samples, Identification of toxin profiles and quantification of toxins in reference material (microalgae and fish), stock of reference material containing CTXs .
- Gathering of **environmental data Literature and data search** for the future development of models to understand the ecology of ciguatera.

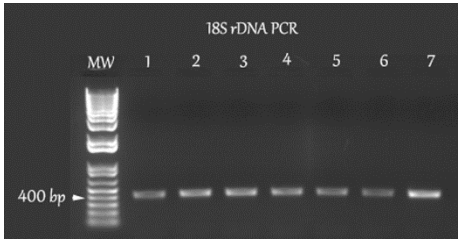
Sampling for *Gambierdiscus* spp. from the field and fish from the field and the market Environmental data:

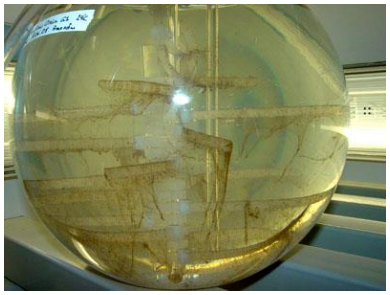
Madeira
Canary Islands
Balearic Islands
Crete
Cyprus



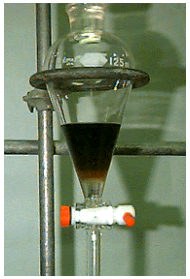


Isolation of *Gambierdiscus* spp, identification, establishment of cultures of *Gambierdiscus* spp. in the laboratory (low-scale and large-scale)



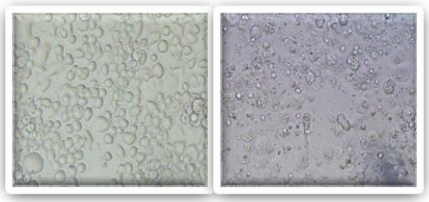


Extraction of *Gambierdiscus* spp., fish samples and purification of extracts



Toxicity evaluation with a cell-based assay

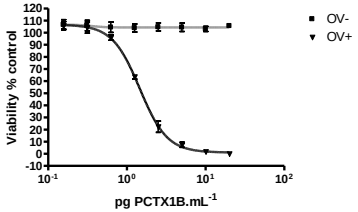
Neuro2a cells



No toxicity Toxicity

MTT viability assay

Quantification



Identification and quantification of CTXs with LC-MS/MS (In collaboration with GRANT 4)

SG3 Partners:

- Institut de Recerca i Tecnologia Agroalimentàries, **IRTA**, Generalitat de Catalunya (Spain)
- Universidad de Las Palmas de Gran Canarias, **ULPGC** (Spain)
- Canary Health Services , **SCS** , Gobierno de Canarias (Spain)
- Instituto Portugues do Mar e da Atmosfera, **IPMA** (Portugal)
- Aristotle University of Thessaloniki, **AUT** (Greece)
- State General Laboratory, **SGL**, Ministry of Health (Cyprus)

SG3 Collaborators:

- Regional Ministry of Agriculture, Livestock, Fisheries and Water, Gobierno de Canarias (Spain)
- Direção Regional das Pescas of Madeira (Portugal)
- Natural Park of Madeira (Portugal)

SA4 MAIN GOAL

To characterize the risk associated with Ciguatera poisoning, by developing an efficient analytical methodology with ability to confirm the identity of the toxins involved in the contamination of phytoplankton and fish samples, as well as developing standards and reference materials to be used for this evaluation and characterization as well as to help participants in the project to set up the evaluated methodologies.

Specific Agreement No. 4: characterization of ciguatoxins present in EU contaminated profiles by LC_MS/MS and HRMS: development of standards and secondary reference materials

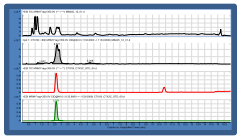
MAIN TASK:

- **Development of a Standard Operating Procedure (SOP)** for the Liquid Chromatography coupled with tandem Mass Spectrometry (LC-MS/MS) analysis of Ciguatoxins present in different matrices (phytoplankton and fish)
- Application of the **LC-MS/MS to** all the samples previously identified as positive in the Grant responsible **for Identification** (now Grant 3)
- **Confirmation by High Resolution Mass Spectrometry (HRMS)** of the CTXs profile of the contaminated samples previously evaluated by LC-MS/MS.
- Development of **CTX standards and secondary reference** materials from contaminated fish
- **Intercomparative study** through Proficiency Testing of the methodologies developed and applied by Partners and collaborators involved in the Project, as well as testing materials (standards and secondary reference materials) developed in this project through the collaboration with the EU Reference laboratory for marine biotoxins (**EURLMB**)

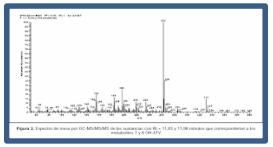
DELIVERABLES

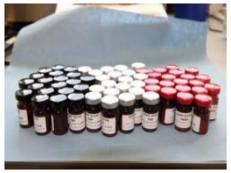
SOP for LC -MS determination of CTXs

Identification of CTXs



Confirmation of CTXs (accurate mass)

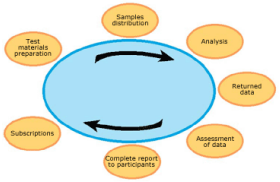




CTXs standards

Fish tissue RM

Intercomparison Report



HARMONIZATION

UNIVERSIDADE DE VIGO

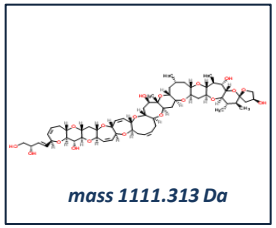
PARTNERS & COLLABORATORS

TOHOKU UNIVERSITY

JFRL
Japan Food Research Laboratories

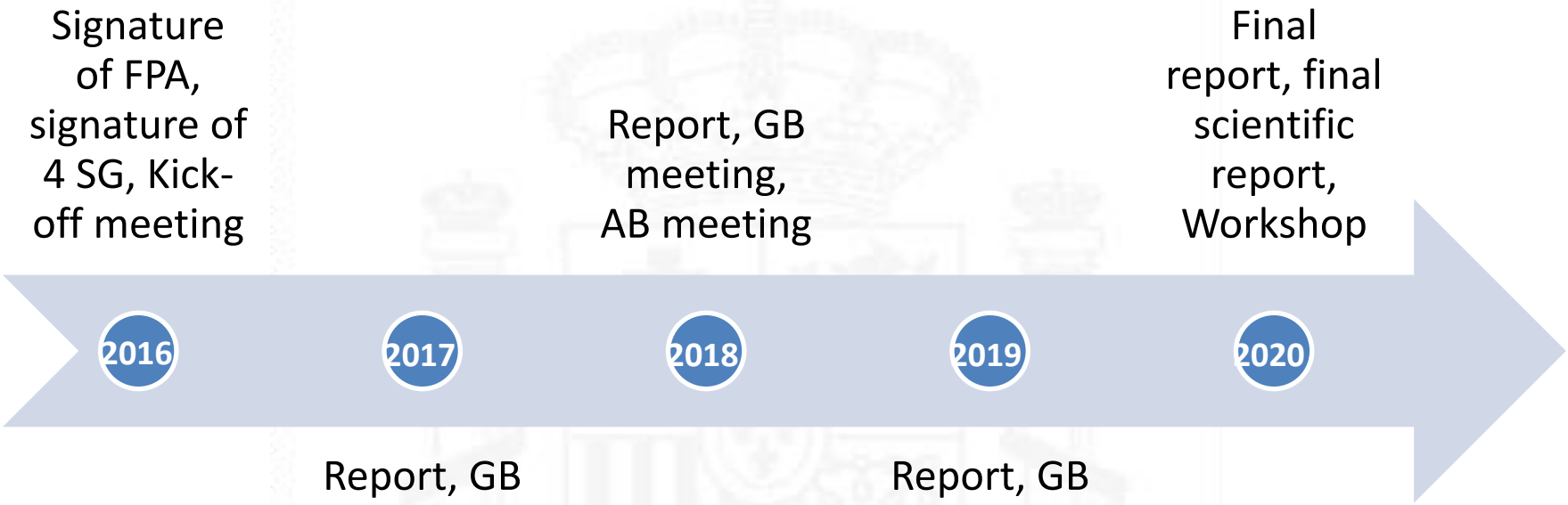
Development of standards for CTXs

Ifremer



Confirmation of CTX identity

TIMELINE



Length of SG: 4 years since signature date

Kick off meeting Madrid 31 may, 1, 2 June 2016

Specific Agreement No. 2:Determination of the incidence and epidemiological characteristics of ciguatera cases in Europe

MAIN TASKS:

- To stablish a ciguatera case definition.
- To identify data sources for ciguatera cases and outbreaks.
- To elaborate the surveillance protocol.
- To collect ciguatera cases and outbreaks.
- To analyse the information.
- **To produce a report.**

DETERMINATION OF THE INCIDENCE AND EPIDEMIOLOGICAL CHARACTERISTICS OF CIGUATERA CASES IN EUROPE

Leader: Instituto de Salud Carlos III, CNE (National Centre of Epidemiology), Spain

Partner:

- Instituto Nacional de Saúde Doutor Ricardo Jorge, Portugal;
- University of Thessaly, Greece;
- Canary Health Service (Servicio Canario de la Salud), Spain;
- BfR, Germany

Collaborators: Maria G. Koliou, Ministry of Health, Nicosia Cyprus;

OTHER MEMBER STATES MAY JOIN AS THEY WILL BE ASKED TO CONTRIBUTE ON A VOLUNTARY BASIS TO THE REPORTING OF CIGUATERA CASES

Case definition

Canary Islands case definition

2. Definición de caso de "Intoxicación por Ciguatera":

Paciente con **antecedentes de haber consumido pescado de alguna de las especies consideradas de riesgo*** y que presenta un cuadro clínico con:

- **Síntomas neurológicos:** pueden presentarse un amplio abanico de síntomas, aunque los mas frecuentes son: parestesias (en labios, manos y extremidades), prurito, inversión de la temperatura (los objetos fríos dan sensación de estar calientes y los calientes se perciben como fríos), dolor y debilidad en extremidades inferiores.

- Estos síntomas pueden cursar simultáneamente o aparecer días después de un cuadro digestivo, caracterizado por uno o varios de los siguientes **síntomas gastrointestinales:** vómito, diarrea, nauseas y dolor abdominal, que suelen presentarse en las primeras 48 horas (más frecuentemente entre 2 a 8 horas) posteriores a la ingesta,

* Las especies consideradas de riesgo y que se capturan en Canarias son: medregal, abade, mero, pejerrey, bicuda, morena, peto y sierra.

No existe ninguna prueba analítica que confirme el diagnóstico en el paciente. La confirmación solo es posible si se detecta presencia de ciguatoxina en el análisis del pescado consumido por los afectados. **Es importante indicar al paciente que si tiene algún resto del pescado (crudo ó cocinado) se abstenga de consumirlo, lo coloque en una bolsa de plástico limpia y lo conserve en el congelador de su nevera hasta que sea recogido y trasladado al laboratorio por personal de la Dirección General de Salud Pública.**

Consumption of fish of a risk specie

Neurological symptoms: paraesthesia in lips, hands and extremities; pruritus; reversal of hot and cold sensations, pain and weakness of the lower extremities.

Gastrointestinal symptoms: vomiting, diarrhoea, nausea and abdominal cramps.

Confirmation: detection of CTX in fish

http://www3.gobiernodecanarias.org/sanidad/scs/contenidoGenerico.jsp?idDocument=bb1799ed-b4c0-11de-ae50-15aa3b9230b7&idCarpeta=0f67aaf7-9d88-11e0-b0dc-e55e53ccc42c

Data sources

DECISION No 1082/2013/EU OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL

of 22 October 2013

on serious cross-border threats to health and repealing Decision No 2119/98/EC

1. This Decision shall apply to public health measures in relation to the following categories of serious cross-border threats to health:

(a) threats of biological origin, consisting of:

(i) communicable diseases;

(ii) antimicrobial resistance and healthcare-associated infections related to communicable diseases (hereinafter 'related special health issues');

(iii) biotoxins or other harmful biological agents not related to communicable diseases;

(b) threats of chemical origin;

(c) threats of environmental origin;

(d) threats of unknown origin;

(e) events which may constitute public health emergencies of international concern under the IHR, provided that they fall under one of the categories of threats set out in points (a) to (d).

Ciguatera cases are not reported to the ECDC*

** European Centre for Diseases Prevention and Control*

Data sources

Contact | Sitemap | Social media

ecdc

European Centre for Disease Prevention and Control

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Food- and waterborne diseases and zoonoses

- News
- Events

Publications

- Eurosurveillance articles
- External quality assessments
- Risk assessments
- Surveillance reports
- Annual epidemiological

Food- and waterborne diseases and zoonoses Programme

The ECDC FWD Programme covers the following diseases:
anthrax, botulism, brucellosis, campylobacteriosis, cholera, cryptosporidiosis, echinococcosis, giardiasis, hepatitis A, legionellosis, leptospirosis, listeriosis, norovirus infection, salmonellosis, shigellosis, toxoplasmosis, trichinellosis, typhoid and paratyphoid fever, variant Creutzfeldt-Jakob disease, Shiga toxin/verocytotoxin -producing *Escherichia coli* (STEC/VTEC) infection, and yersiniosis.

Related health topics

- Anthrax
- Botulism
- Cholera
- Cryptosporidiosis
- Echinococcosis
- Enterohaemorrhagic Escherichia coli (leads to Escherichia coli)
- Escherichia coli (E.coli)
- Food- and wateborne

ECDC Extranet | EPIS FWD TEST ENVIRONMENT

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You are here: EPIS > FWD > Urgent Inquiries

All urgent inquiries

Open urgent inquiries | **All urgent inquiries** | Closed urgent inquiries

UI ID	Title	Created	Country or institution	Pathogens	Number of posts	Modified	Closing date
UI-089		17/09/2010 04:45 PM		marine toxin	1	17/09/2010 04:45 PM	08/07/2013 05:07 AM

Data sources

12.12.2003 EN Official Journal of the European Union L 325/31

2012

DIRECTIVE 2003/99/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL
of 17 November 2003
on the monitoring of zoonoses and zoonotic agents, amending Council Decision 90/424/EEC and repealing Council Directive 92/117/EEC

EU summary report on zoonoses, zoonotic agents and food-borne outbreaks 2012

Table OUT15. Strong-evidence food-borne outbreaks caused by other causative agents in the EU, 2012

Agent	Country	Strong-evidence outbreaks			
		N	Human cases		
			Cases	Hospitalised	Deaths
Histamine	Belgium	4	28	2	0
	Denmark	3	9	1	0
	France	13	62	6	0
	Latvia	1	16	-	0
	Slovenia	1	3	1	0
	Spain	8	101	1	0
	Sweden	2	15	-	-
	United Kingdom	2	7	3	0
	EU Total	**34**	**241**	**14**	**0**
Marine biotoxins	Belgium	2	110	0	0
	France	12	47	1	0
	Germany	1	-	-	-
	Spain	3	27	1	0
	EU Total	**18**	**184**	**2**	**0**
Mushroom toxins	Poland	1	3	3	0
	Spain	6	22	18	1
	EU Total	**7**	**25**	**21**	**1**
Mycotoxins	Denmark	2	26	0	0
	EU Total	**2**	**26**	**0**	**0**
Atropine	France	1	2	2	0
	EU Total	**1**	**2**	**2**	**0**

2013

European Food Safety Authority EFSA Journal 2015;13(1):3991

Table 35. Strong-evidence food-borne outbreaks caused by other causative strong-evidence water-borne outbreaks), 2013

Causative agent	Country	N outbreaks	Cases	Hospitalised	Deaths
Histamine	Belgium	3	7	3	0
	Croatia	1	3	1	0
	Finland	3	27	1	0
	France	14	71	22	0
	Germany	7	17	3	0
	Spain	11	85	0	0
	Sweden	3	21	0	0
	Switzerland	3	7	1	0
Marine biotoxins	France	22	114	4	0
	Spain	1	16	0	0
Mushroom toxins	Poland	3	9	9	1
	Spain	2	8	3	0
Mycotoxins	Denmark	5	140	0	0
Wax esters (from fish)	Spain	1	2	0	0
Total (MS)		76	520	46	1

Data sources

SCIENTIFIC REPORT

EFSA Journal

APPROVED: 2 December 2015 PUBLISHED: 17 December 2015 AMENDED: 4 February 2016

doi:10.2903/j.efsa.2015.4329

Table 37: Strong-evidence food-borne outbreaks caused by other causative agents (excluding strong-evidence water-borne outbreaks), 2014

Causative agent	Country	Strong-evidence outbreaks			
		Number	Cases	Hospitalized	Deaths
Chemical agents	Spain	2	13	0	0
Histamine	Belgium	2	4	2	0
	Denmark	1	3	0	0
	Finland	1	23	2	0
	France	5	25	4	0
	Germany	4	10	0	0
	Spain	18	84	3	0
	Sweden	3	13	2	0
	United Kingdom	1	2	2	0
Marine biotoxins	Ireland	1	4	1	0
Marine biotoxins – ciguatoxin	France	5	21	0	0
Marine biotoxins – muscle-paralysing toxin	Spain	1	2	0	0
Mushroom toxins	Poland	2	4	4	1
	Spain	10	24	18	0
Lectin	Denmark	1	4	0	0
Wax esters (from fish)	Spain	1	2	0	0
Total (MS)		58	238	38	1

Data sources

RASFF Portal

European Commission > RASFF Portal

Notifications list | New search | Export to XML | Print version

Notification details - 2015.0088

ciguatoxins in wild-caught fish (Caranx spp and others) from Sri Lanka

Reference:	2015.0088	Notification type:	food - information for attention - border control - consignment released
Notification date:	27/01/2015	Action taken:	informing authorities
Last update:	06/01/2016	Distribution status:	distribution restricted to notifying country
Notification from:	France (FR)	Product:	wild-caught fish (Caranx spp and others)
Classification	information for attention	Product category:	fish and fish products
Risk decision	serious	Published in RASFF Consumers' Portal	has never been published

Hazards

Substance / Hazard	Category	Analytical result	Units	Sampling date
ciguatoxins	biotoxins (other)			02/12/2014

Countries/organisations concerned (D = distribution, O = origin)

France (D) | Sri Lanka (O)

Surveillance protocol

Questionnaire Canary Islands

- ✓ Demographic information
- ✓ Clinical information
- ✓ Epidemiological information
- ✓ Contact details of the reporting person

Surveillance protocol

Questionnaire Florida

Ciguatera Case Report Form V36, March 2013

This form is designed to be filled out electronically and attached to the case in **Merlin**.
Please complete the Extended Data screen in Merlin using information collected here.

***Blue fields are REQUIRED**

Merlin case number: **County number:** **Investigator:**

PROFILE DETAILS

***Last name:** **First name:** **Middle:**

Parent or guardian name:

***Gender:** Male / Female / Unk. ***Birth (mm/dd/yy):** **Death (mm/dd/yy):** ***Race:** American Indian/Alaska Native / Asian/Pacific Islander / Black / White / Other / Unk ***Ethnicity:** Hispanic / Non-Hispanic / Unk

Street address:

City: ***State:** ***Zip code:** ***County:**

Home phone: **Other phone:** **Emergency phone:**

CASE INFORMATION

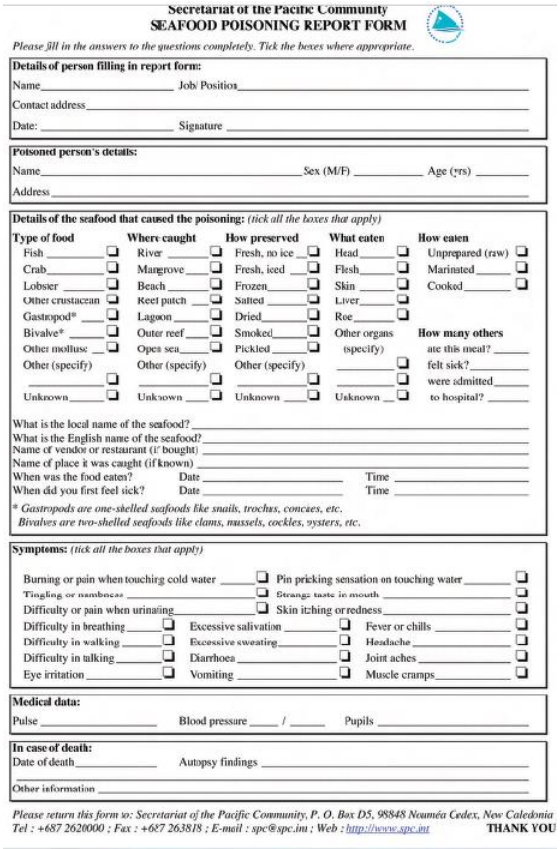
***Imported:** Acquired in FL / Acquired In US, not in FL / Acquired outside US / Unk **Origin:**

***Outbreak:** Outbreak-associated / Sporadic / Unk

Outbreak ID: ***Case classification:** Primary / Secondary / Unk

Reporter type: **Reporter's name:**

Questionnaire Secretariat of the Pacific Comunity



Secretariat of the Pacific Community
SEAFOOD POISONING REPORT FORM

Please fill in the answers to the questions completely. Tick the boxes where appropriate.

Details of person filling in report form:
Name Job/ Position
Contact address
Date: Signature

Poisoned person's details:
Name Sex (M/F) Age (yrs)
Address

Details of the seafood that caused the poisoning: *(tick all the boxes that apply)*

Type of food	Where caught	How preserved	What eaten	How eaten
Fish	River	Fresh, no ice	Head	Unprepared (raw)
Crab	Mangrove	Fresh, iced	Flesh	Marinated
Lobster	Beach	Frozen	Skin	Cooked
Other crustacean	Reef patch	Salted	Liver	
Gastropod*	Lagoon	Dried	Roe	
Bivalve*	Outer reef	Smoked	Other organs	**How many others**
Other mollusc	Open sea	Pickled	(specify)	ate this meal?
Other (specify)	Other (specify)	Other (specify)		felt sick?
				were admitted
Unknown	Unknown	Unknown	Unknown	to hospital?

What is the local name of the seafood?
What is the English name of the seafood?
Name of vendor or restaurant (if bought)
Name of place it was caught (if known)
When was the food eaten? Date Time
When did you first feel sick? Date Time

** Gastropods are one-shelled seafoods like snails, trochus, concaes, etc.*
Bivalves are two-shelled seafoods like clams, mussels, cockles, oysters, etc.

Symptoms: *(tick all the boxes that apply)*

Burning or pain when touching cold water	Pin pricking sensation on touching water	
Tingling or numbness	Strange taste in mouth	
Difficulty or pain when urinating	Skin itching or redness	
Difficulty in breathing	Excessive salivation	Fever or chills
Difficulty in walking	Excessive sweating	Headache
Difficulty in talking	Diarrhoea	Joint aches
Eye irritation	Vomiting	Muscle cramps

Medical data:
Pulse Blood pressure / Pupils

In case of death:
Date of death Autopsy findings
Other information

Please return this form to: Secretariat of the Pacific Community, P. O. Box D5, 98848 Noumea Cedex, New Caledonia
Tel : +687 2620000 ; Fax : +687 263818 ; E-mail : spc@spc.int ; Web : http://www.spc.int **THANK YOU**

EU/EFSA

Risk characterization of ciguatera in Europe.
Recommendations.
A framework for the future prediction of ciguatera.

PARTNERS AND COLABORATORS WITHIN THE FPA

Exchanging and sharing samples, methods, know-how.
Consolidate and increase links.
Scientific collaborations.

RISK MANAGERS

Better tools and strategies for environmental and public health/food safety institutions that will have to manage ciguatera.

SCIENTIFIC COMMUNITY

Provide high standard scientific papers and communications.

HOW TO COLLABORATE IN THE PROJECT (SG2): WHAT DO WE NEED

- **ADVISORY FORUM:** To provide the list of persons in charge of reporting food-borne outbreaks to EFSA.
- **REPORTING AUTHORITIES**: updated information on food-borne outbreaks due to ciguatoxins (marine biotoxins).
  - Food-borne outbreaks not sent to EFSA.
  - More information from all ciguatoxin (marine biotoxins) outbreaks.

CONTACT: mvarelam@isciii.es