



## The impact on maritime transport of health threats due to biological, chemical and radiological agents, including communicable diseases

### Introduction

Maritime transport can impact population health in European Union (EU). In 2010, 1.9 million cargo ships visits were recorded in 1200 seaports in the 25 maritime EU Member States. Approximately 390 million ferry passengers passed through EU Member States (MS) ports in 2009, 5.2 million Europeans cruised in 2010 and about 50,000 European seafarers were employed in cruise ships. In 2011, 45 cruise lines with 198 cruise ships operated in Europe. The European market has grown by 41% over the past three years and has more than doubled over the last ten. Many different authorities (up to five) are responsible for conducting inspections within the same country without always having clearly defined roles and responsibilities. Lack of communication, knowledge and training in relation to hygiene inspections from competent authorities has been observed. The practices of hygiene inspections on board ships vary between European countries and many times and within the same country or even within the same port. Finally, difficulties occurred in Europe in the implementation of the International Health Regulations (IHR 2005) and issuance of Ship Sanitation Certificate (SSC).

To address these issues the European Commission funded two European projects: SHIPSAN (<http://www.eu-shipsan.gr>) and SHIPSAN TRAINET (<http://www.shipsan.eu/trainet>) from 2006 until 2011. In February 2013, the new EU SHIPSAN ACT Joint Action started addressing health issues in maritime transport.

### Objectives

The general objective of this action is to strengthen an integrated strategy and sustainable mechanisms at EU level for safeguarding the health of travelers and crew of passenger and cargo ships and preventing the cross-border spread of diseases, improving citizens' health security. Actions will focus on prevention, identification, assessment and link with existing mechanisms for response coordination to serious cross border threats to health caused by

CBRN agents. Actions will facilitate the implementation of EU legislation: a) Decisions 2119/98/EC, 2000/57/EC, linking SHIPSAN communication platform with existing systems, b) Directive 2010/65/EU, by supporting EMSA to implement Maritime Declaration of Health (MDH), c) Directive 2009/13/EC, by developing an outline of a risk assessment tool for occupational health on ships, d) the IHR, by supporting core capacities Annex 1 b by training, inspections, contingency planning guidance and IHR provisions for conveyances and conveyance operators including SSC.

The duration of the Joint Action will be 39 months and 30 partners from 23 countries will participate.

The Specific Objectives of the Joint Action are:

1. To produce a report describing evidence for events and consequences due to CBRN agents in all types of ships; training needs for core capacities under IHR and practices related to fishing vessels and inland waterways in at least 18 EUMS, by month 24
2. To develop guidance on risk assessment and response to chemical/radiological events (accidental/deliberate release) on ships, by month 16, to be used as part of the IHR contingency planning at points of entry of EUMS
3. To develop an outline of a risk assessment tool for occupational and public health risks per cargo ship type, by month 24
4. To increase port health staff and crew competencies on prevention/risk assessment/response to CBRN threats by training more than 5 trainers within each EUMS and by e-learning courses available to staff in all EUMS and companies operating in EU
5. To improve quality of inspections and bring a consistent/proportionate approach to inspection of all ship types, by providing on the job training, issuing yearly inspection schedule, operating information tools for recording/sharing inspection results.
6. To maintain and update SHIPSAN information tools for MDH transmission, risk assessment/response to events, issuance of SSC and information communication and support establishment of the National Single Window(Directive 2010/65/EU) in relation to MDH

## Expected outcomes

Competencies of authorities' staff and industry on prevention/control/response to health threats due to chemical, radionuclear, and biological agents (CBRN) including infectious diseases will be improved. Information tools will allow risk assessment, standard response, rapid information sharing, follow up of events related to maritime transport. The Joint Action will contribute to improved governance in public health risk management and a better coordinated and balanced response to cross-border health threats. Guidelines will be produced to allow consistent preparedness planning in MS based on shared and common standards, facilitating IHR implementation. SHIPSAN ACT partnership will be trusted and recognized by target groups and stakeholders for its scientific capacity and in supporting industry to prevent and respond to untoward public health events. EU SHIPSAN ACT tools will be widely known and recognized for their usefulness and validity by target groups and stakeholders. Inland navigation and ferry industry will be engaged to SHIPSAN ACT actions and recognize their value.

## Work Packages

### Work Package 1: Coordination

*Work package leader: University of Thessaly, Larissa, Greece*

### Work Package 2: Dissemination

*Work package leader: University of Thessaly, Larissa, Greece*

### Work Package 3: Evaluation

*Work package leader: Ministry of Health, Rome, Italy*

### Work Package 4: State of the Art covering sea and inland water vessels

*Work package leader: National Institute of Public Health, Organisation, Instituto de Salud Carlos III, Madrid, Spain*

### Work Package 5: Integrated Inspection Programme

*Work package leader: University of Thessaly, Larissa, Greece*

### Work Package 6: Chemical and radiological incidents on ships risk assessment and management

*Health Protection Agency, Chilton, United Kingdom*

### Work Package 7: SHIPSAN ACT information system (SIS)

*Work package leader: University of Thessaly, Larissa, Greece*

### Work Package 8: Training

*Work package leader: National Institute of Public Health, Ljubljana, Slovenia*

### Work Package 9: Occupational health and hygiene in maritime transport

*Work package leader: Universitaetsklinikum Hamburg Eppendorf, Hamburg, Germany*

## The partnership

1. Ministry of Health, Rome, Italy
2. Klaipeda Public Health Centre, Klaipeda, Lithuania
3. Directorate of Health, Reykjavik, Iceland
4. National Institute of Public Health, Ljubljana, Slovenia
5. National Institute of Public Health, Organisation, Instituto de Salud Carlos III, Madrid, Spain
6. National School of Public Health, Athens, Greece
7. Regional Health Inspection, Burgas, Bulgaria
8. Health Protection Agency, Chilton, United Kingdom
9. Universitaetsklinikum Hamburg Eppendorf, Hamburg, Germany
10. Regional Health Inspection, Varna, Bulgaria
11. Association of Port Health Authorities, London, United Kingdom
12. Health Service Executive, Naas, Ireland
13. Robert Koch-Institut, Berlin, Germany
14. Ministry of Health, Vienna, Austria
15. Federal Public Service of Health, Food Chain Safety and Environment, Brussels, Belgium
16. Ministry of Health, Public Health Services of the Medical and Public Health Services, Nicosia, Cyprus
17. Health Board, Health Care Department, Tallinn, Estonia
18. Ministry of Labour, Employment and Health, Paris, France
19. Minister for Health, the Elderly and Community Care, Malta
20. Norwegian Directorate of Health, Oslo, Norway
21. Ministry of Health, social services and equality, Madrid, Spain
22. Ministry of Health - Department public health, Bucharest, Romania
23. Ministry of Transport, Construction and Regional Development of the Slovak Republik, Department of Chief Public Health Officer, Bratislava, Slovakia
24. Ministry of Health and Social Welfare, Directorate of Sanitary Inspection, Zagreb, Croatia

25. National Center for Hygiene and Safety (LCHV), National Institute for Health and the Environment (RIVM), Amsterdam, Netherlands
26. Municipal Health Services Rotterdam, Rijnmond, Netherlands
27. Ministry of Health, Lisbon, Portugal
28. Medical University of Gdansk, Interdepartmental Institute of Maritime and Tropical Medicine, Gdansk, Poland
29. World Health Organization
30. Centre for Diseases Control and Prevention, Vessel Sanitation Program, USA