

State of the Art report

Results of surveys and literature review for:

A. infectious diseases

B. chemical and radiological events C. fishing vessels

D. core capacities training needs E. inland navigation

Carmen Varela, Miguel Dávila, Francisco Nogareda, Rocío Palmera, Jesús Perez, Nick Bitsolas, Elina Kostara, Martin Dirksen-Fischer, Thomas von Münster, Barbara Mouchtouri, for the SHIPSAN ACT partnership
Work Package Leader: Instituto de Salud Carlos III, Spain and Universitätsklinikum Hamburg-Eppendorf

OBJECTIVES

To describe:

- A. Evidence for chemical, biological and radiological events on ships or at ports.
- B. Characteristics of authorities responsible for responding to radiological and chemical events.
- B. Practices & legal framework related to radiological and chemical events.
- C. Hygiene standards & inspection practices related to fishing vessels.
- D. Training needs related to core capacities under IHR* 2005 at ports.
- E. Practices & responsibilities of port health authorities along inland waterways.

* International Health Regulations. World Health Organization 2005

METHODOLOGY

Part A

- Literature review on **infectious diseases** on all types of ships.

Part B

- Literature review and survey on **chemical and radiological incidents** in maritime transport.

Part C

- Survey on hygiene inspection practices on **fishing vessels** in EU.

Part D

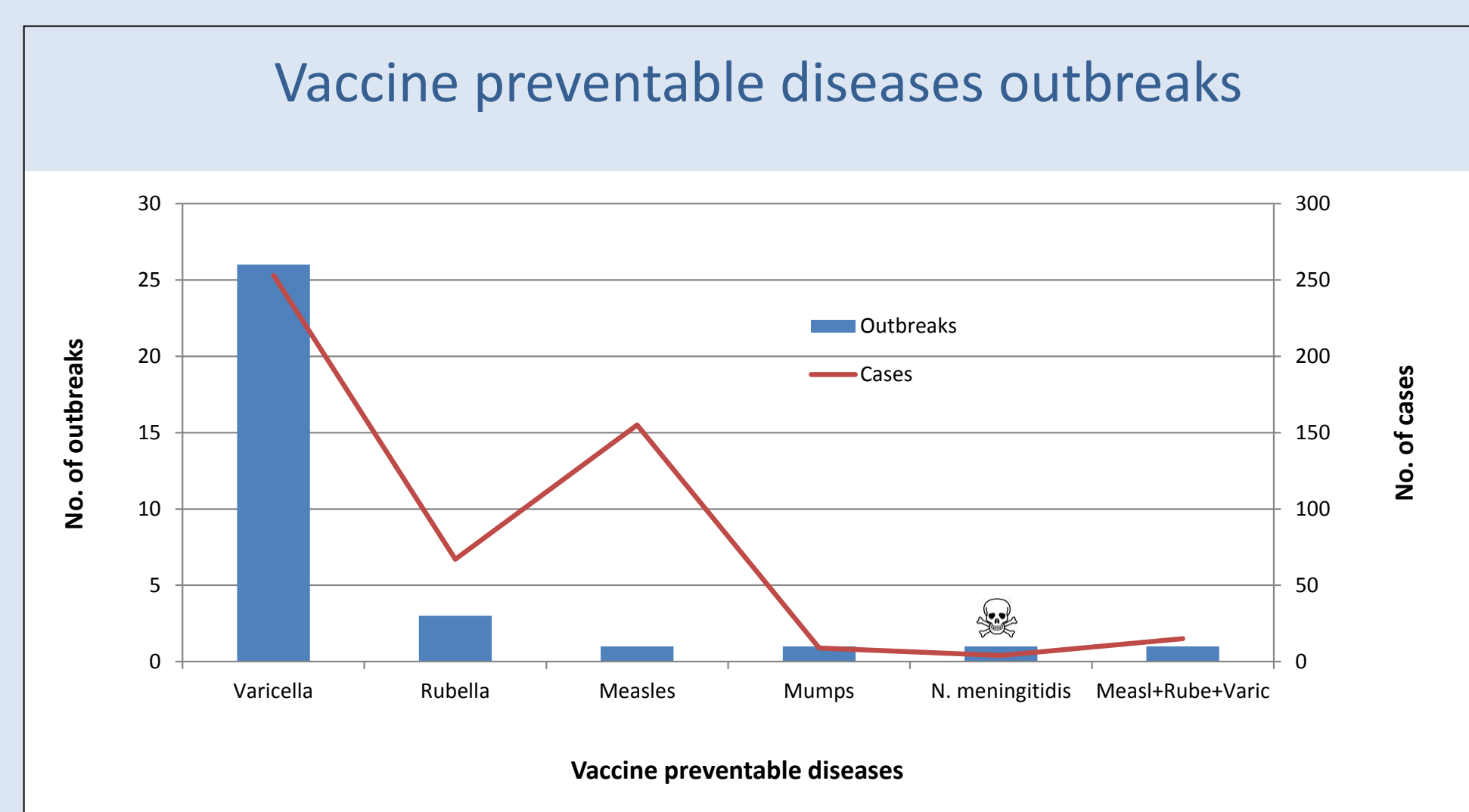
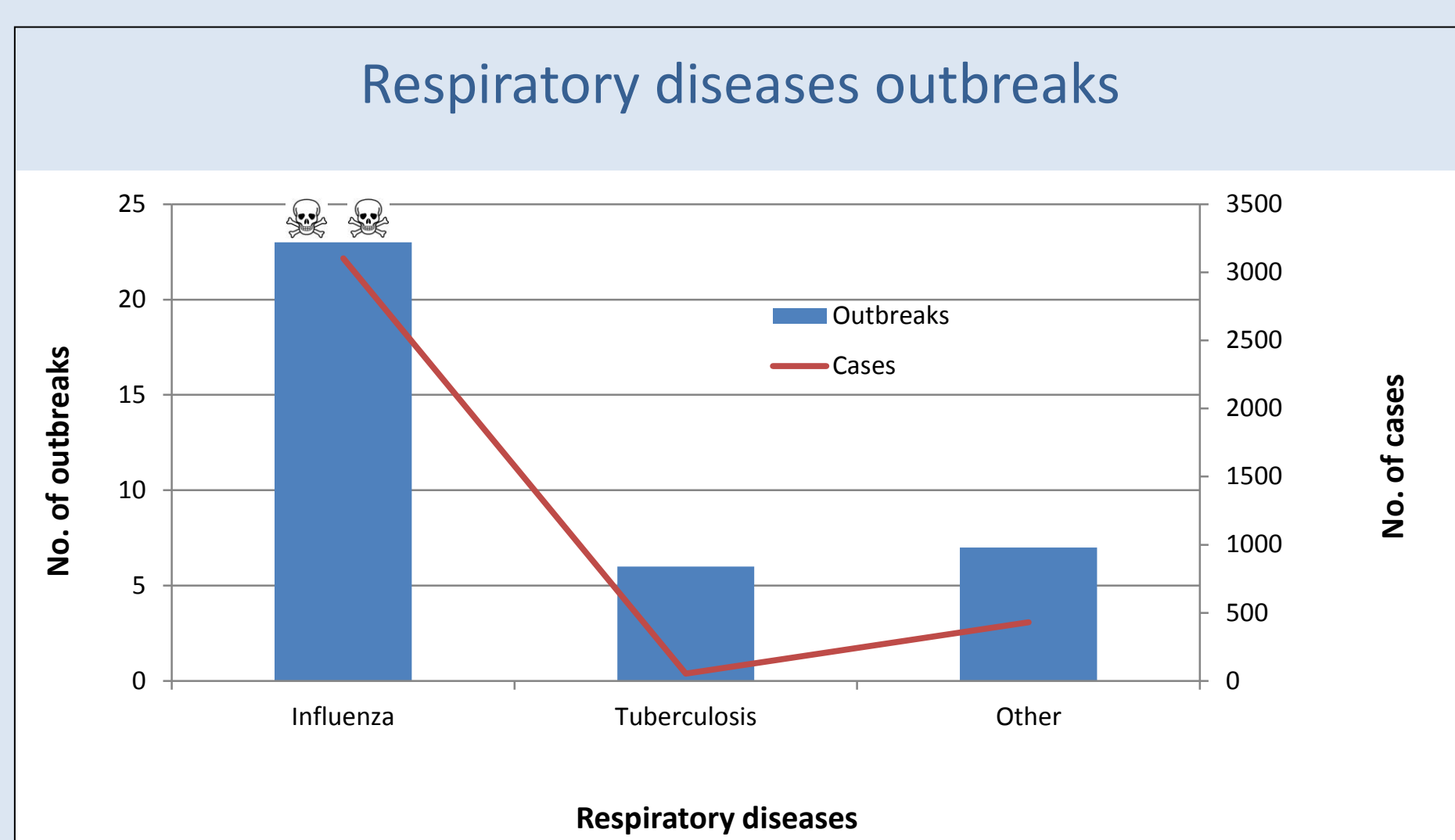
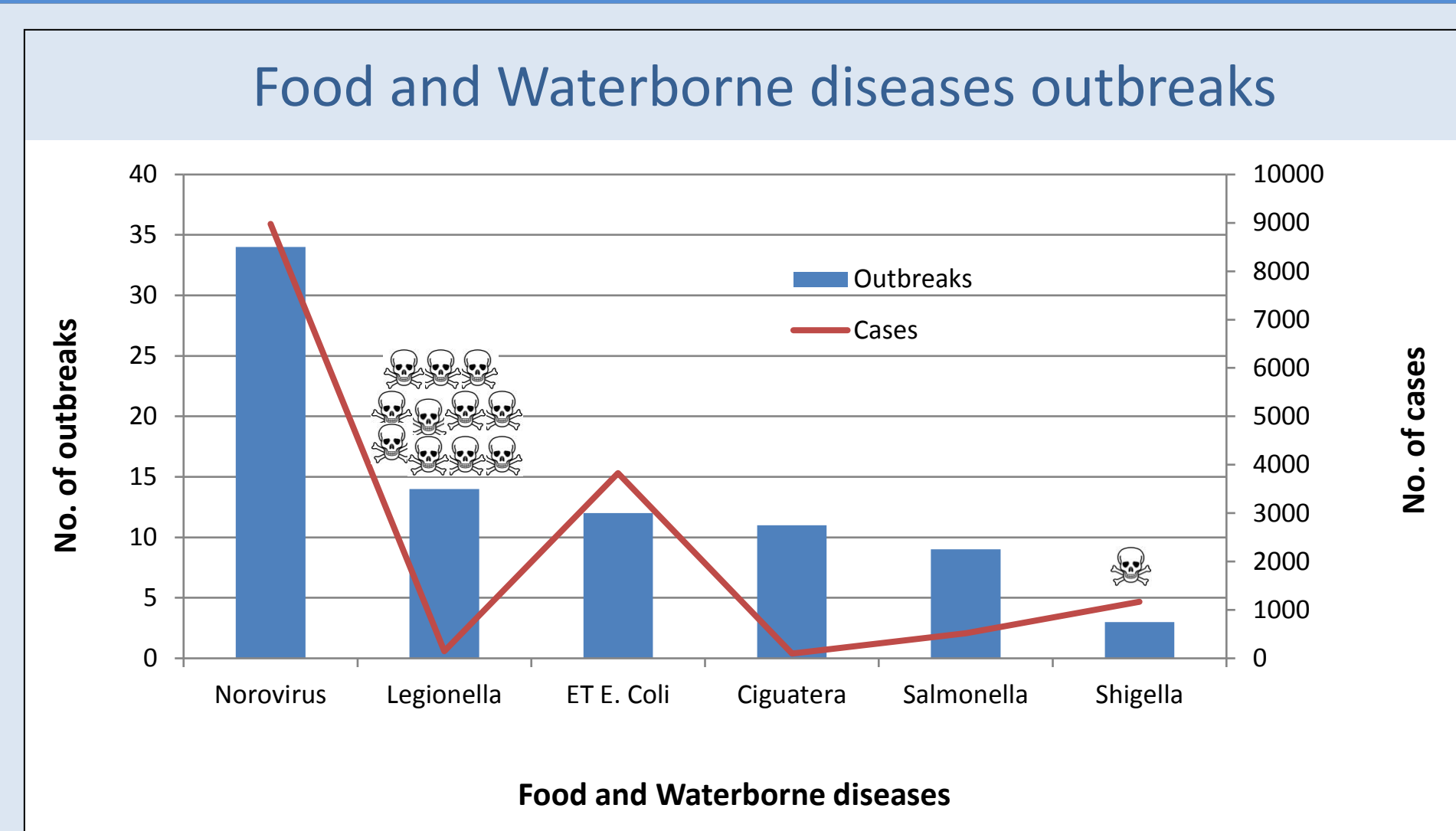
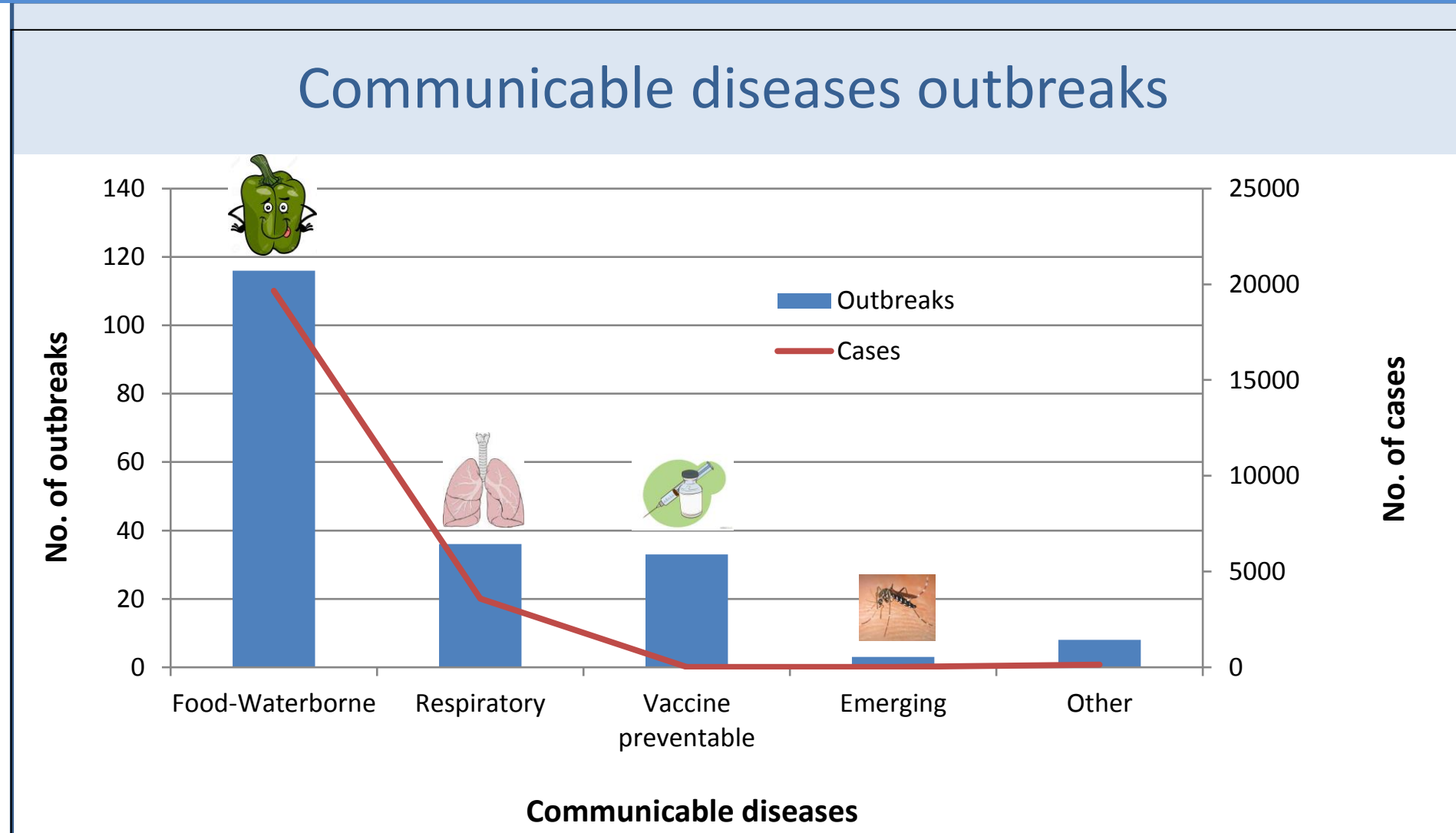
- Survey on training needs related to **core capacities at points of entry-ports** in EU.

Part E

- Survey on practices & responsibilities of port health authorities along **inland waterways** in EU.

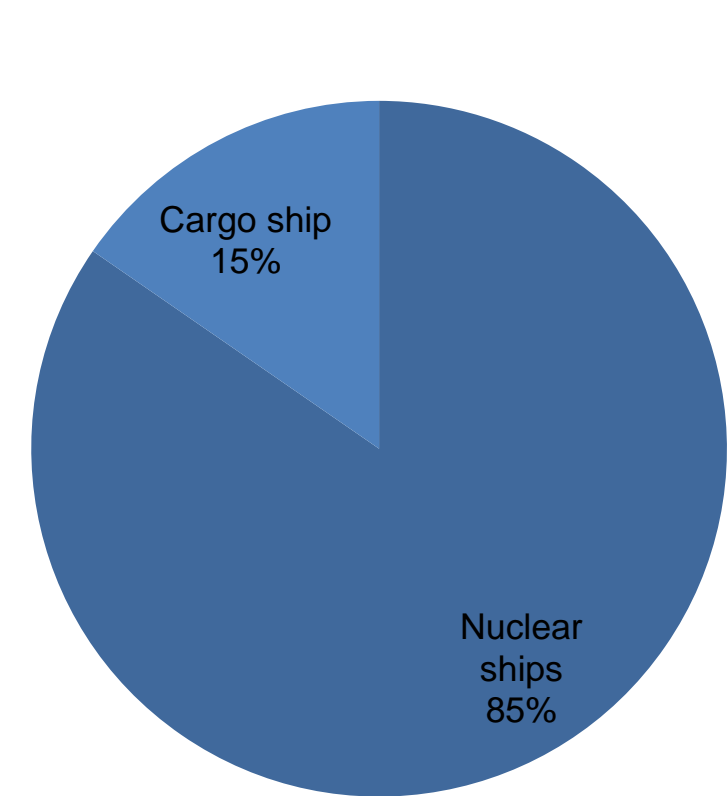
RESULTS

Part A. Infectious diseases

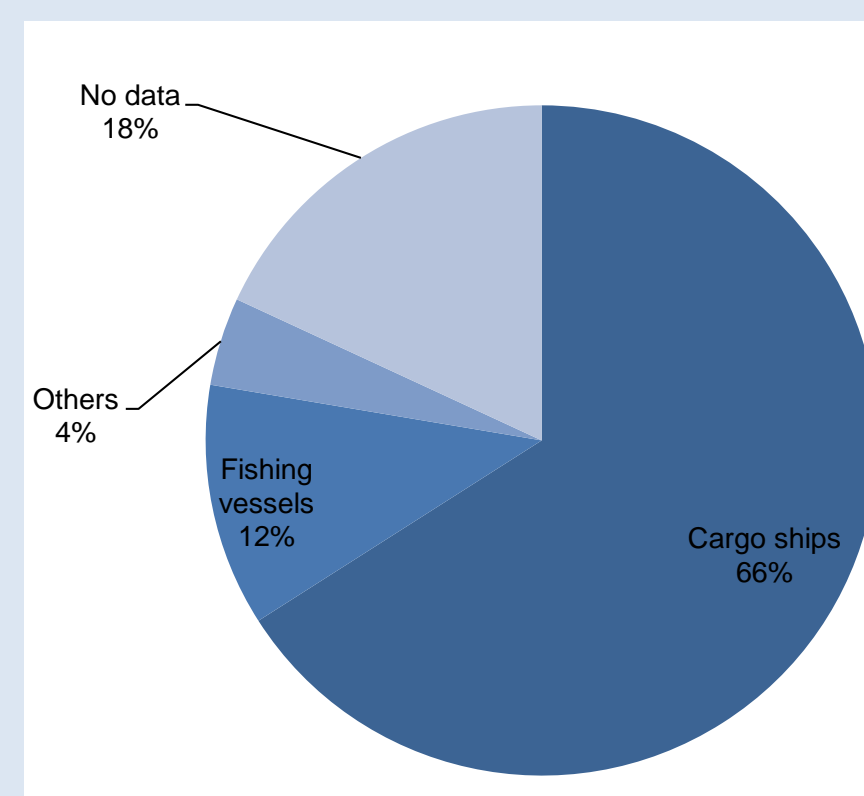


Part B. Radiological and chemical events

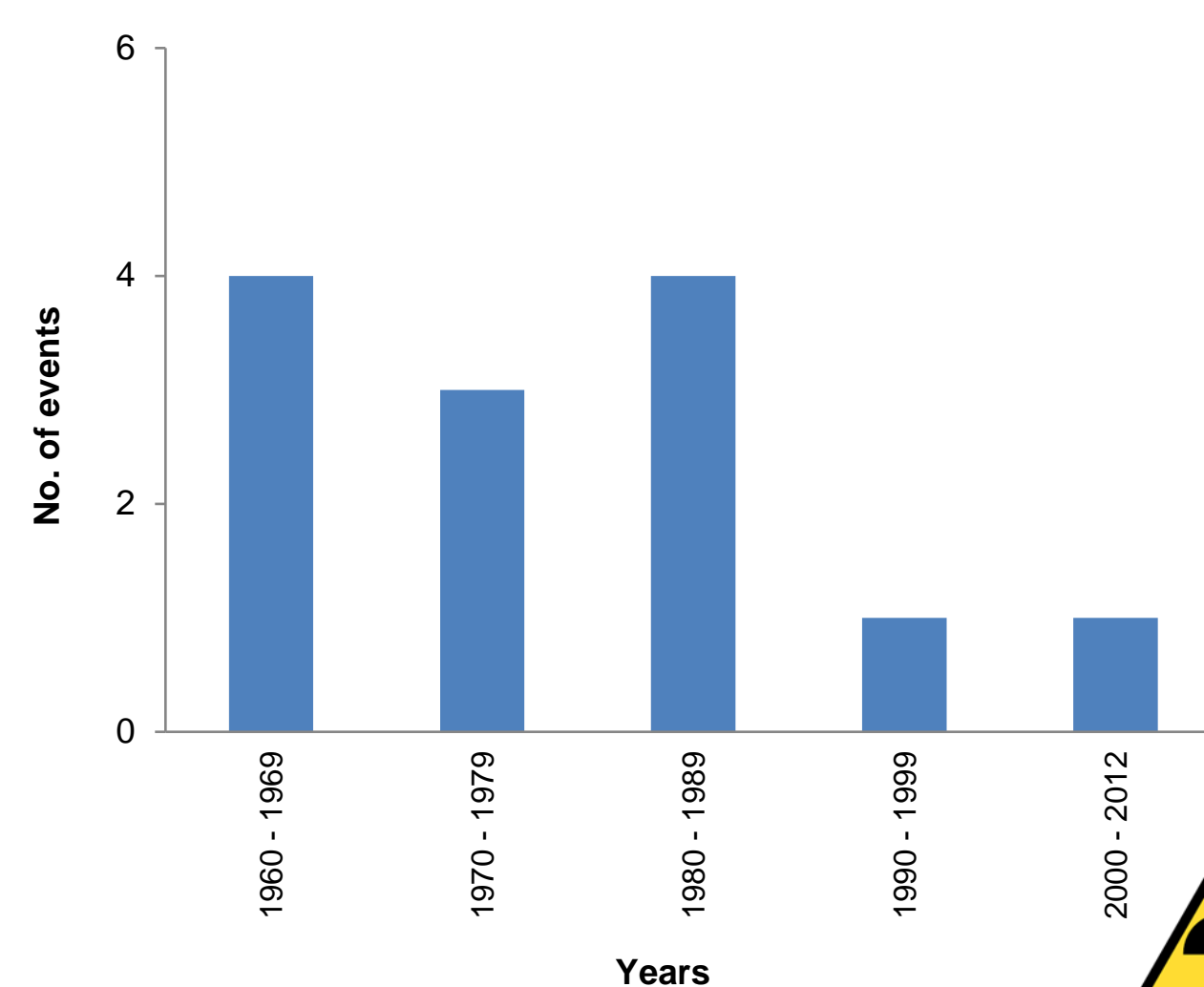
Radiological events according to the type of ship. N=13



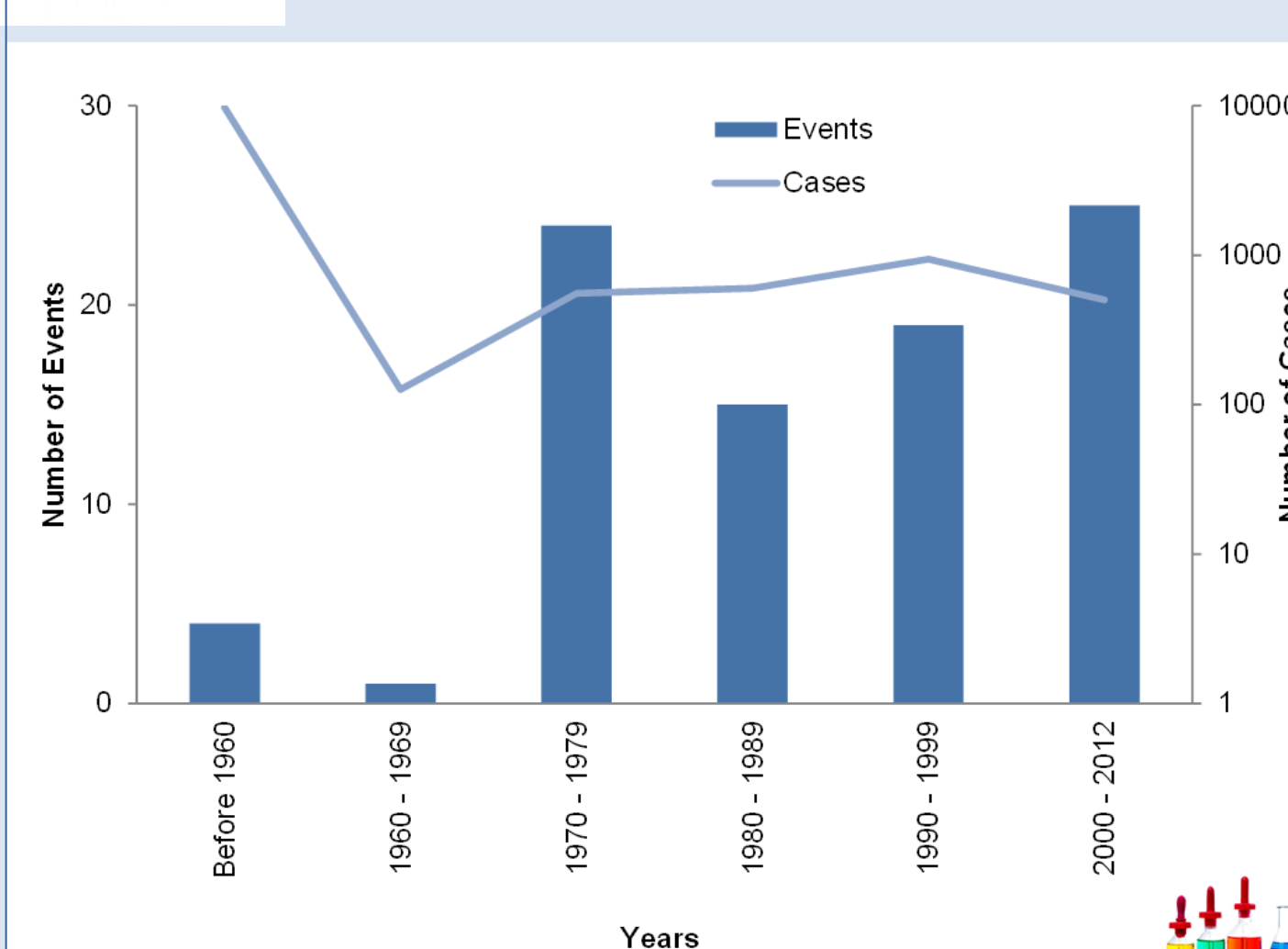
Chemical events according to the type of ship. N=94



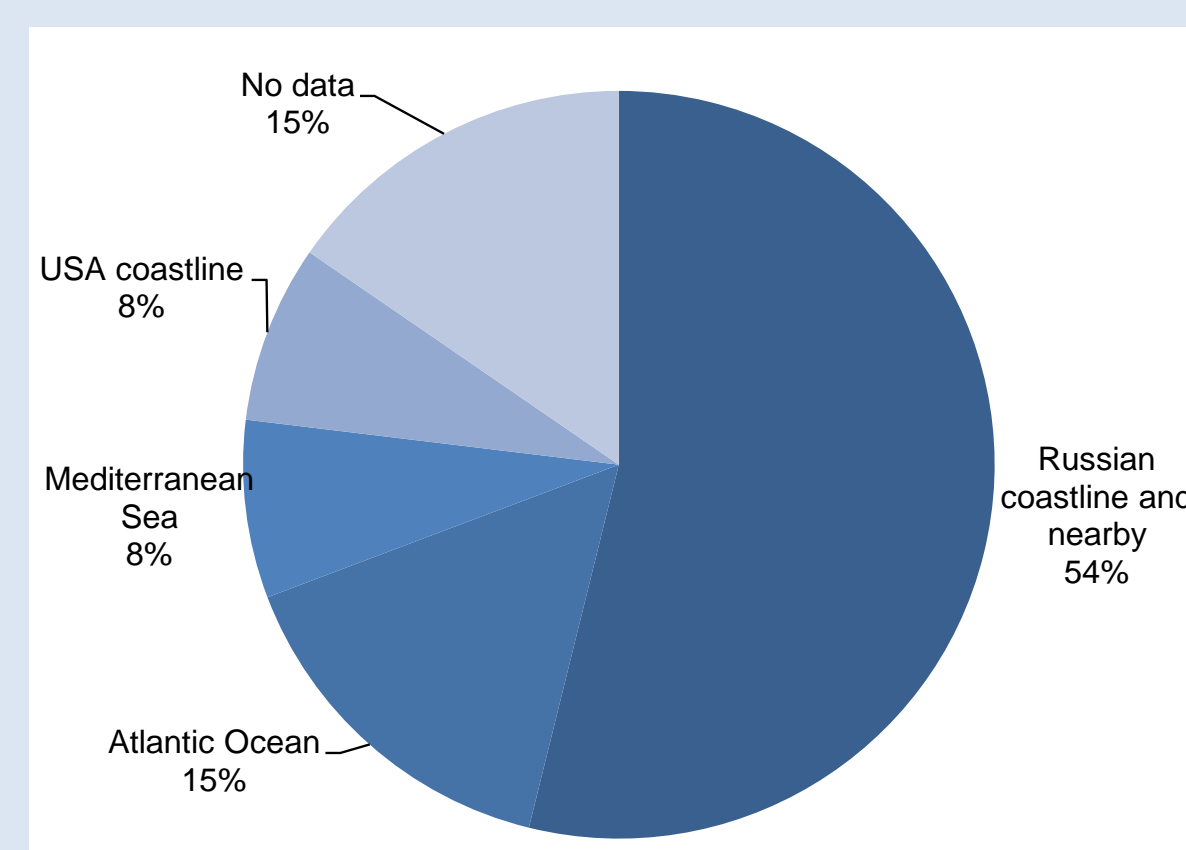
Radiological events. N=13



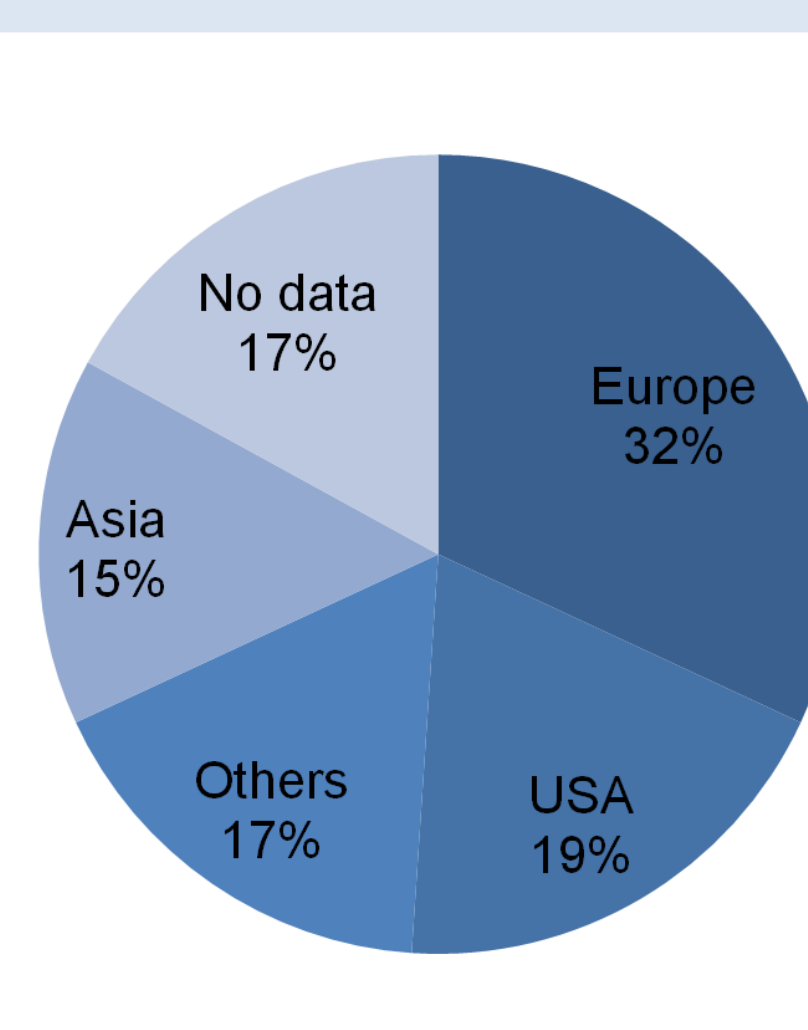
Chemical events. N=94



Radiological events according to the place of occurrence. N=13



Chemical events according to the place of occurrence. N=94



Acknowledgments: To the EU Commission for co-financing the Joint Action and to all participants from the EU and International institutions, the EU MS and the shipping industry.

This poster arises from the EU SHIPSAN ACT Joint Action. Sole responsibility lies with the author and the Consumers, Health, Agriculture and Food Executive Agency (CHAFEA) is not responsible for any use that may be made of the information contained therein.

Partners: 32 partners from 24 EUMS, European and international Institutions, shipping Industry. **Advisory Board:** DG SANTE, CHAFEA, ECDC, WHO, CDC-VSP. **Associated partners:** Regional Health Inspection-Varna, Bulgaria/Regional Health Inspection-Burgas, Bulgaria/Hamburg Port Health Center, Germany/Robert Koch-Institute, Germany/National School of Public Health, Greece/Directorate of Health, Centre for Health Security and Communication Diseases, Iceland/Health Service Executive, Ireland/Ministry of Health, Italy/Klaipeda Public Health Center, Lithuania/National Institute of Public Health, Slovenia/Instituto De Salud Carlos III, Spain/Public Health England, Centre for Radiation Chemical and Environmental Hazards, United Kingdom/Association of Port Health Authorities, United Kingdom. **Collaborating partners:** Ministry of Health, Austria/Federal Public Service of Health, Belgium/Ministry of Health and Social Welfare, Croatia/Ministry of Health, Cyprus/Centre of Maritime Health and Society, University of Southern Denmark/Health Board, Estonia/Ministry of Labour, Employment and Health, France/Minister for Health, the Elderly and Community Care, Malta/Municipal Health Services Rotterdam, Netherlands/National Institute for Health and the Environment, Netherlands/Norwegian Directorate of Health, Norway/Ministry of Health, Portugal/Medical University of Gdansk, Poland/Ministry of Health, Romania/Ministry of Health, social services and equality, Spain/Ministry of Transport, Construction and Regional Development of the Slovak Republic

State of the Art report

Results of surveys and literature review for:

A. infectious diseases

B. chemical and radiological events C. fishing vessels

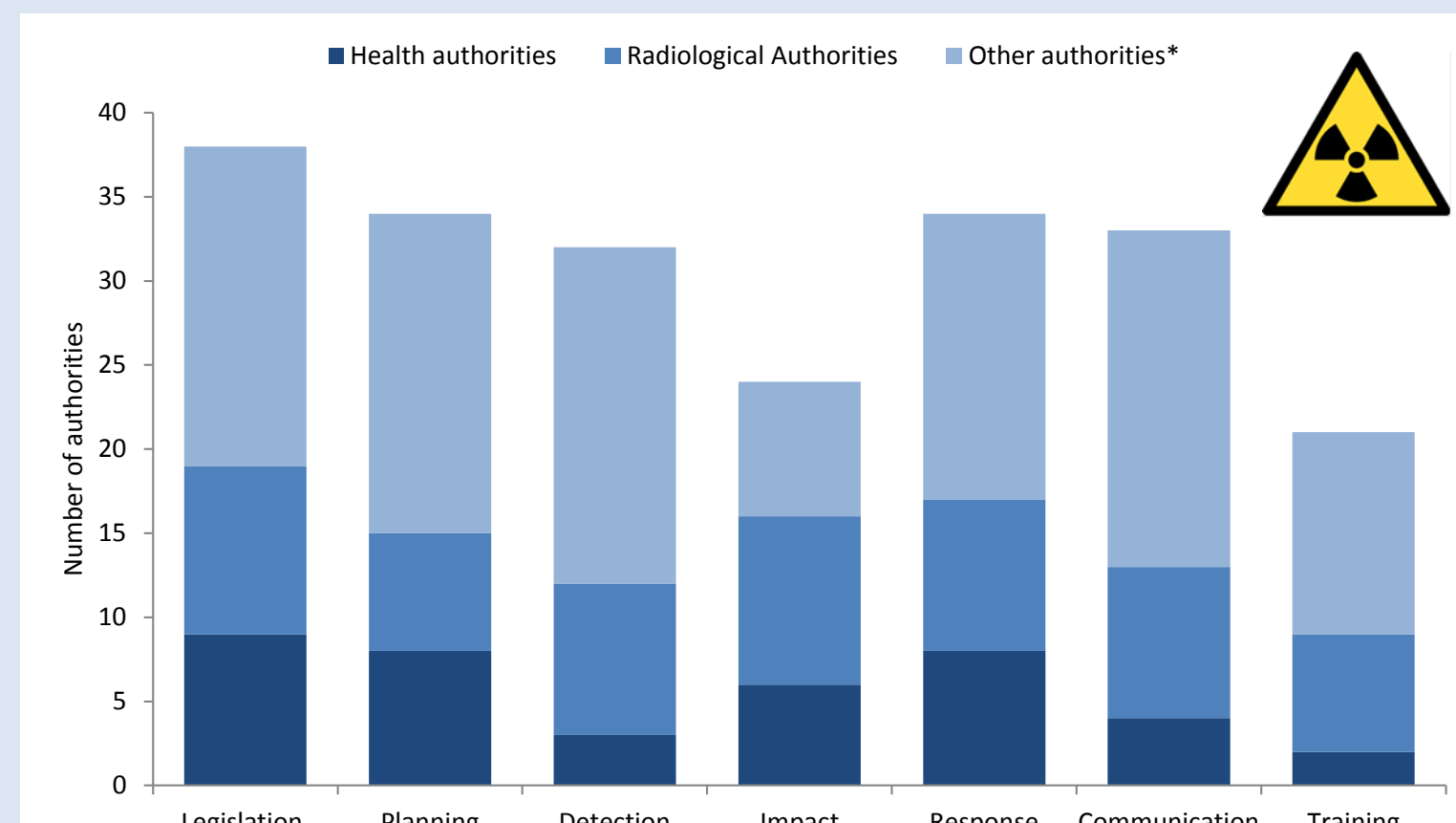
D. core capacities training needs E. inland navigation

Carmen Varela, Miguel Dávila, Francisco Nogareda, Rocío Palmera, Jesús Perez, Nick Bitsolas, Elina Kostara, Martin Dirksen-Fischer, Thomas von Münster, Barbara Mouchtouri, for the SHIPSAN ACT partnership
Work Package Leader: Instituto de Salud Carlos III, Spain and Universitätsklinikum Hamburg-Eppendorf

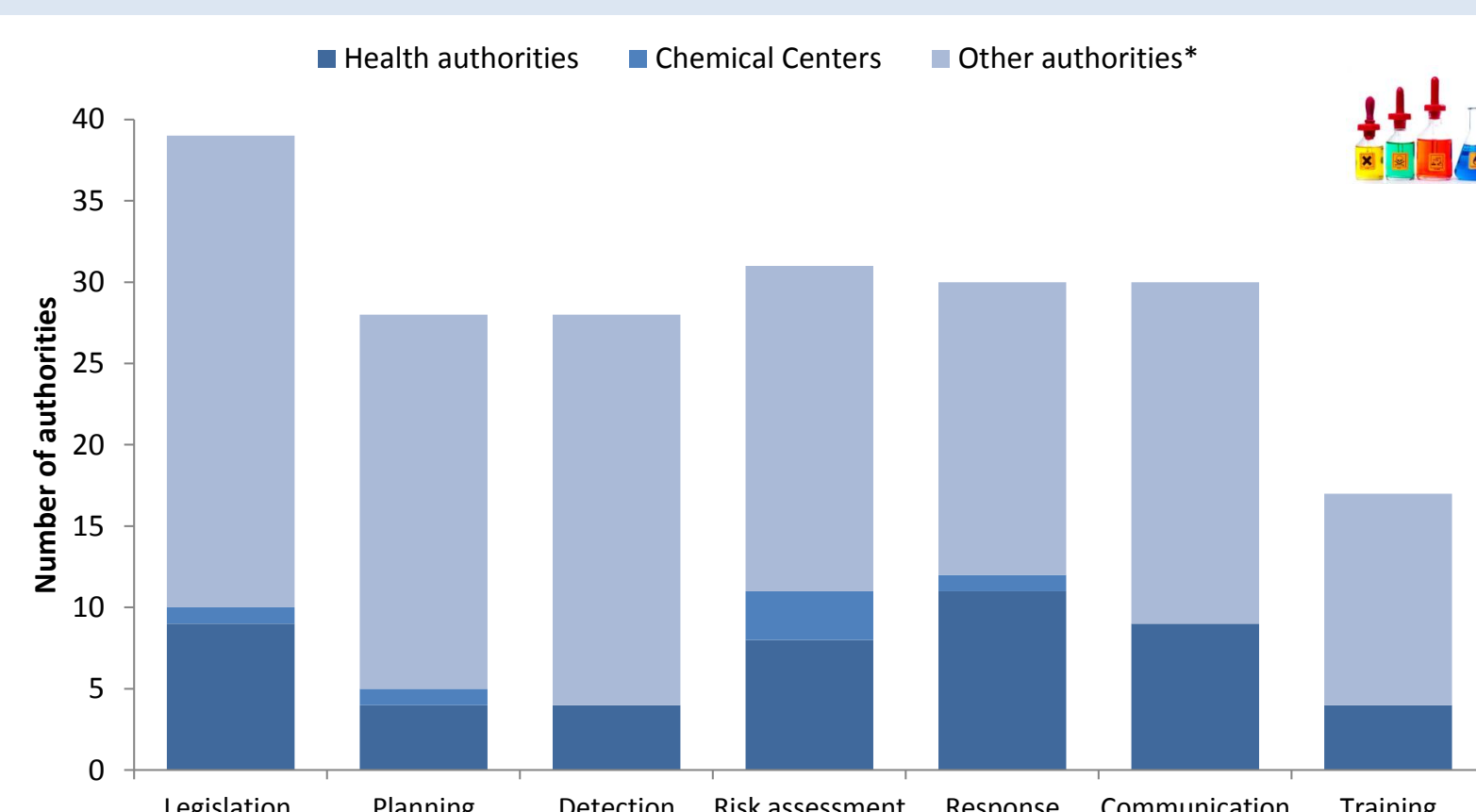
RESULTS

Part B. Management of radiological and chemical events

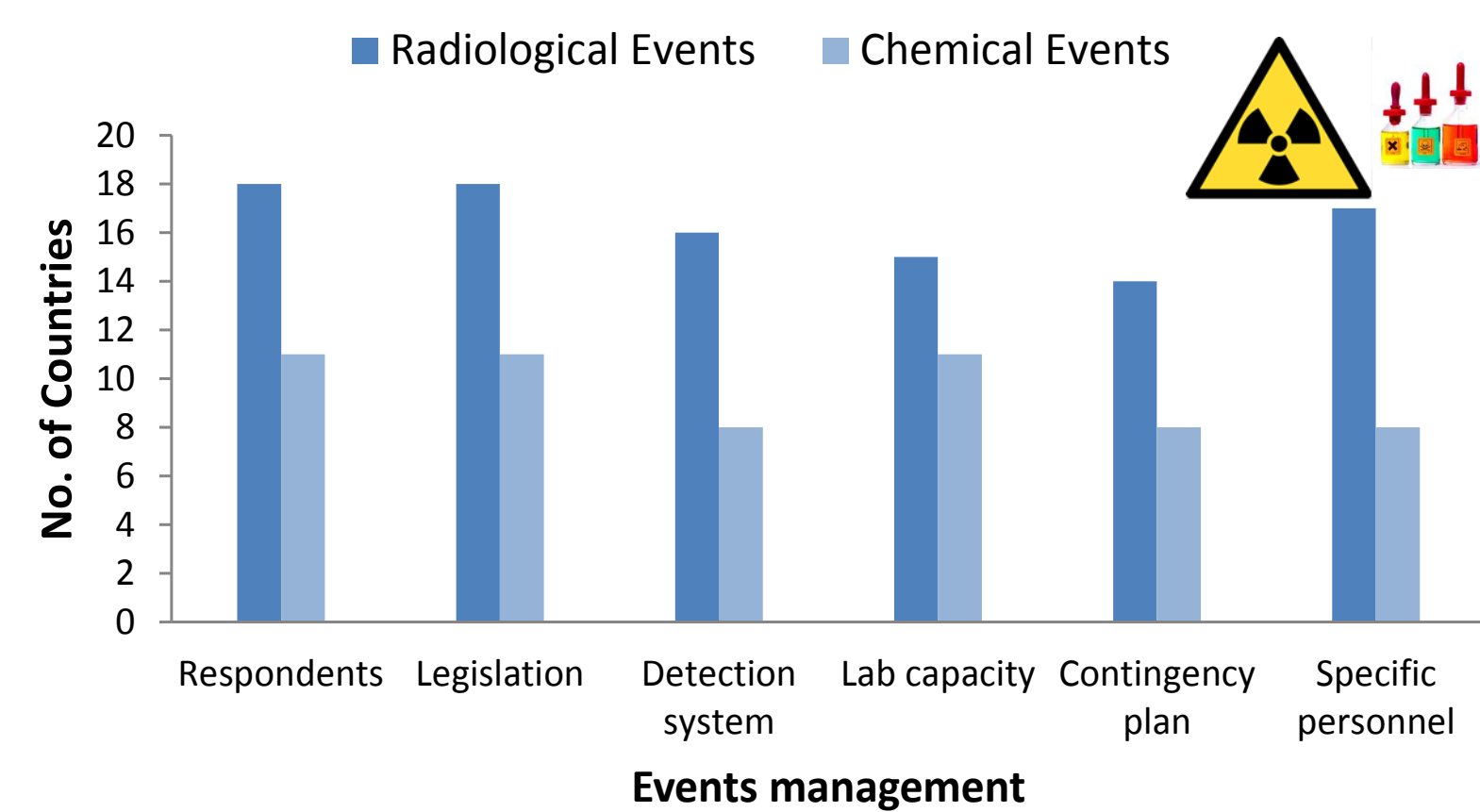
Authorities for radiological events on ships or at ports



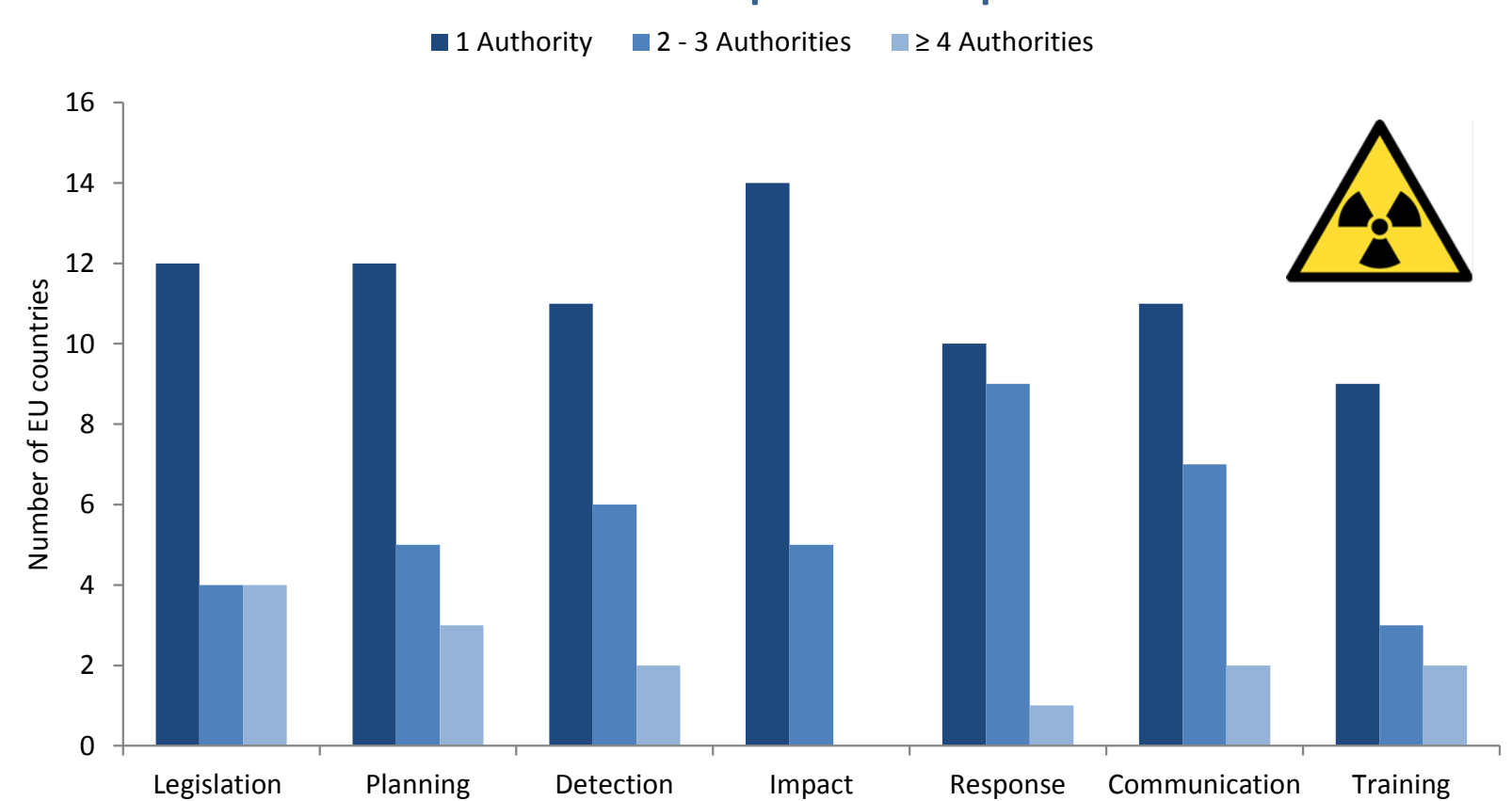
Authorities for chemical events on ships or at ports



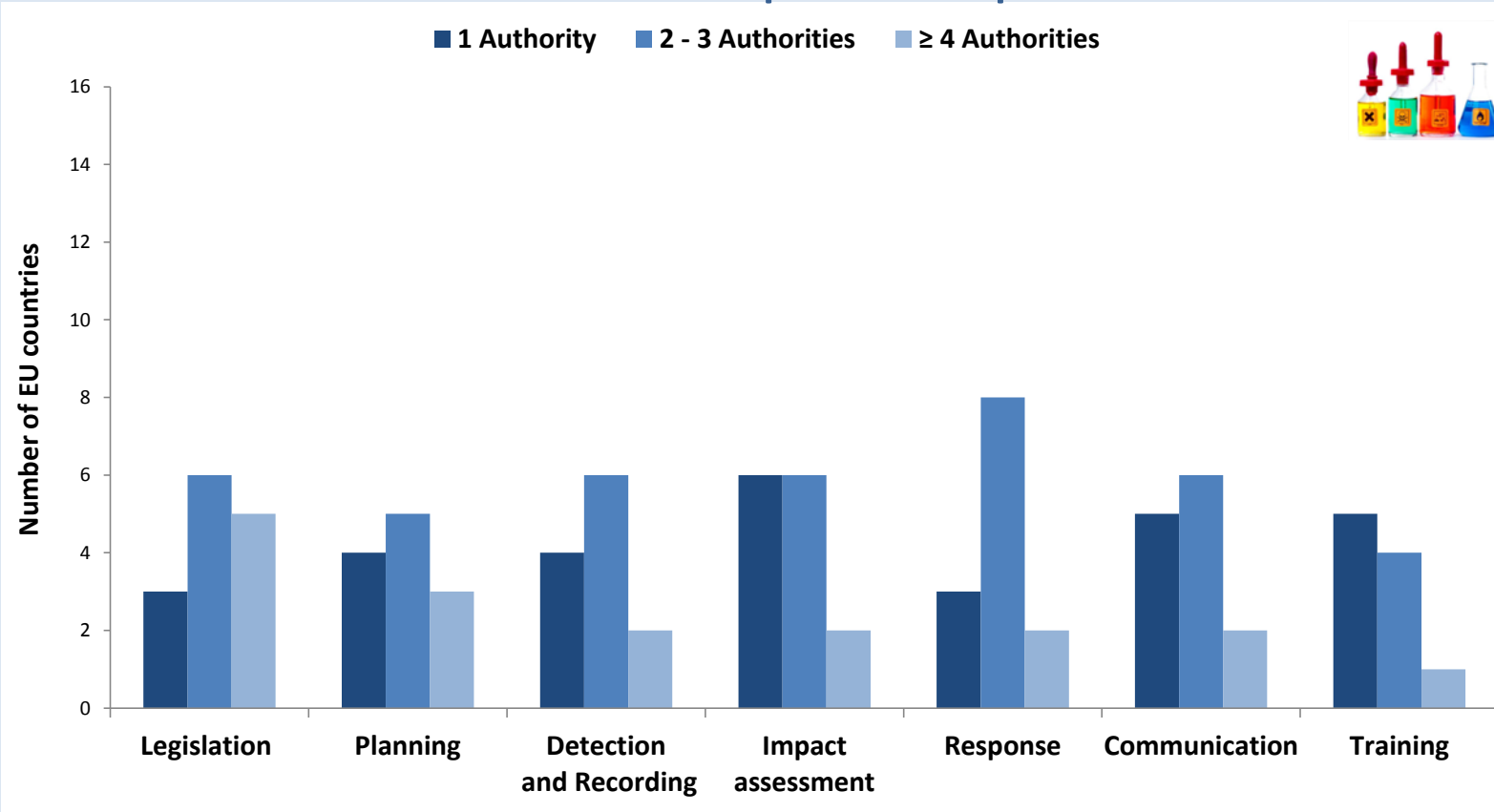
Management of radiological or chemical events on ships or at ports



Number of authorities for management of radiological events on ships or at ports

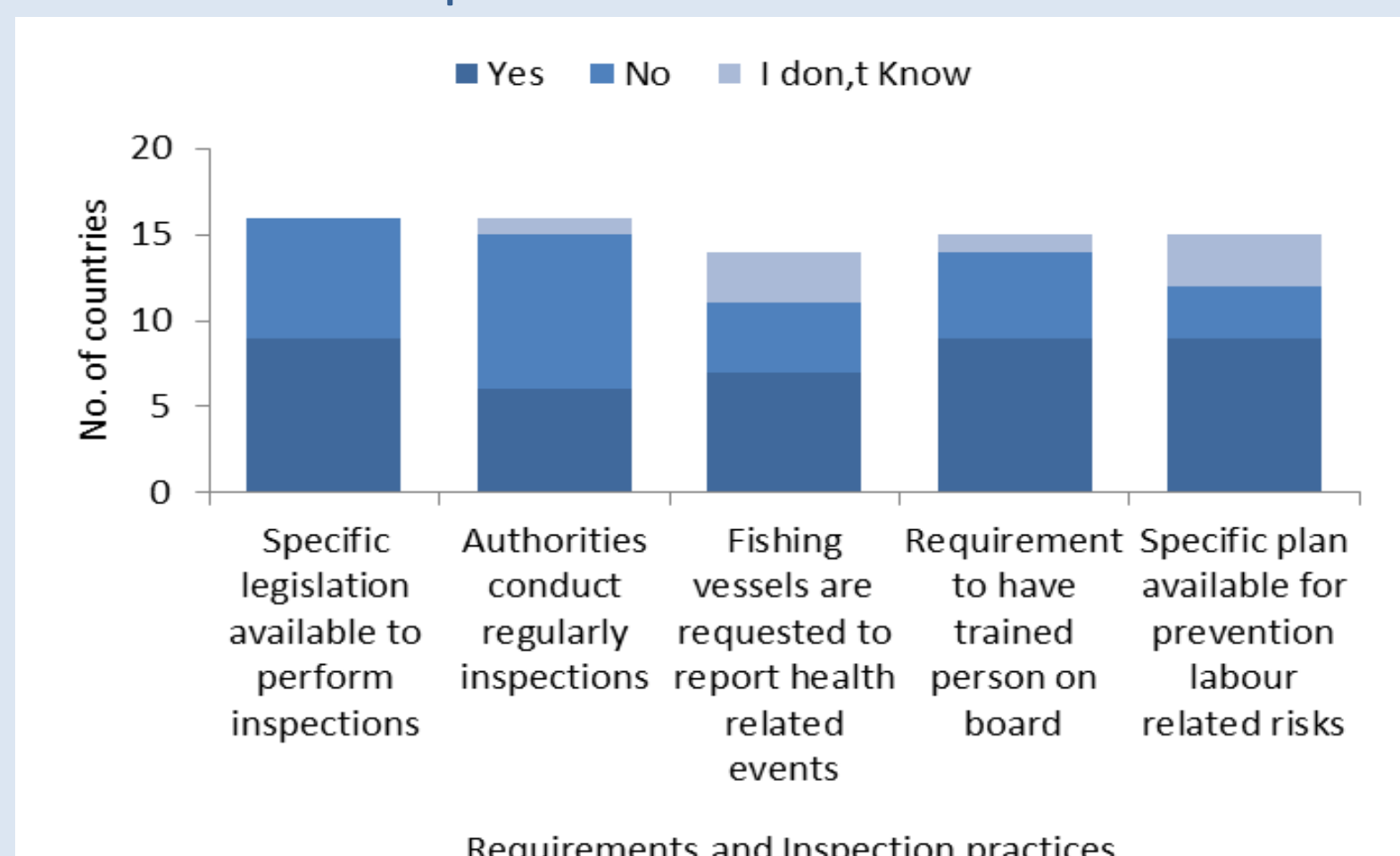


Number of authorities for management of chemical events on ships or at ports



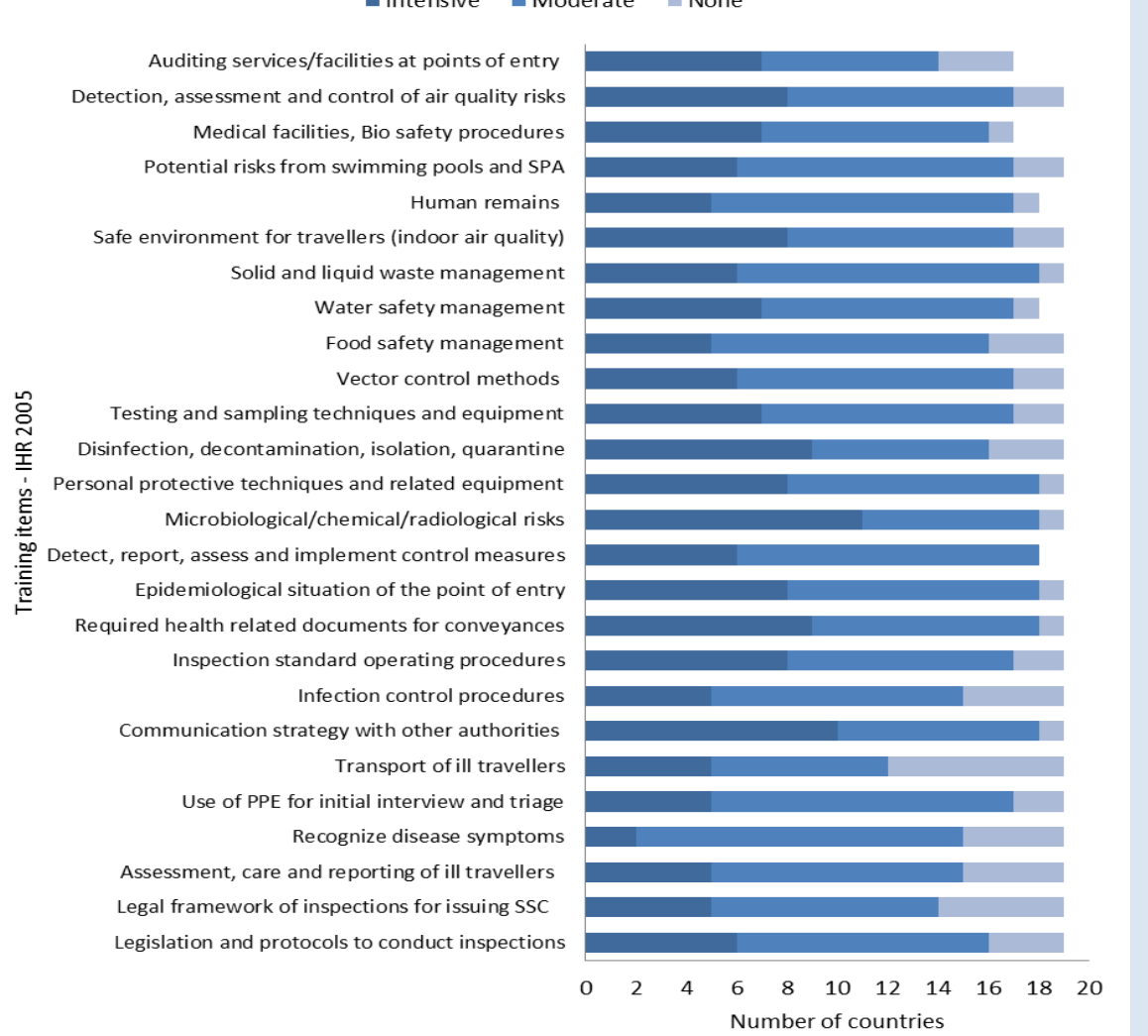
Part C. Fishing vessels

Respondent countries = 16

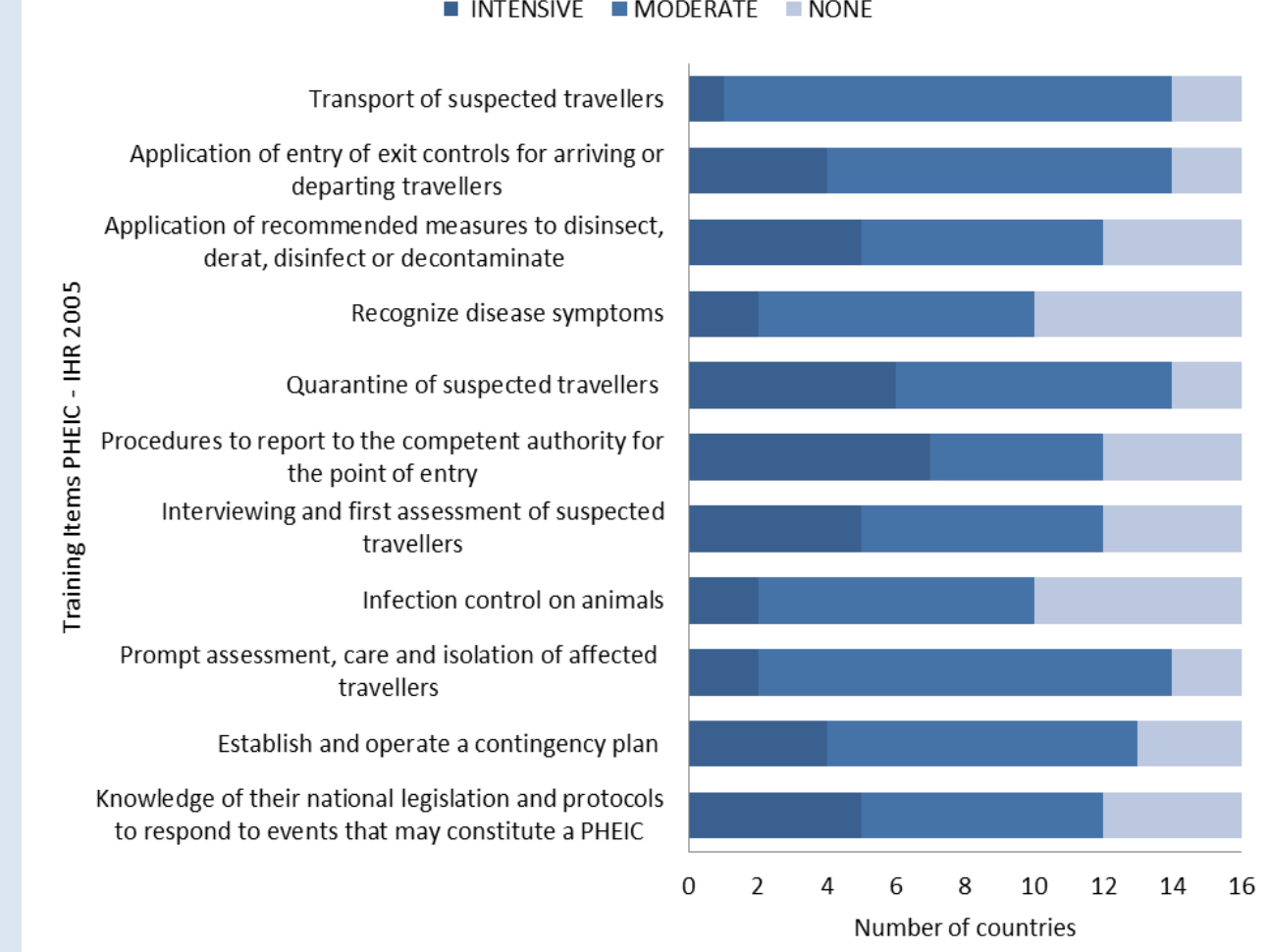


Part D. Core capacities

Training needs at all times



Training needs for public health emergencies of international concern



Part E. Inland waterways

- ☐ Response rates: 13 of 27 countries, 21 authorities.
- ☐ 90% (n=19) reported that core capacities are fully or partially established.
- ☐ The provision of Maritime Declaration of Health and issuing of Ship Sanitation Certificates was heterogeneous.
- ☐ Port to port communication is not well established.

SUMMARY

Part A. Infectious diseases

- ☐ Most frequently published outbreaks on ships were due to food and waterborne diseases, mainly norovirus transmitted from person to person.
- ☐ Highest lethality was due to Legionella.
- ☐ Norovirus and Legionnaires' disease reported more often on cruise ships than in other type of ships.
- ☐ Tuberculosis was not reported on cruise ships or ferries.
- ☐ Vaccine preventable diseases mainly on crew from cruise ships.

Part C. Fishing vessels

- ☐ Most of the countries do not perform regular inspections.
- ☐ Almost 60% of the respondents report any health event to the competent authority.

Part B. Radiological and chemical events on ships or at ports.

- ☐ No published radiological public health events affecting people on ships or at ports in recent years.
- ☐ Chemical events published occurred in cargo and fishing vessels.

Part D. Core capacities

- ☐ Personnel working at ports mentioned specific training needs. Mainly training needs on:
 - Public health risks on microbiological, radiological and chemical agents.
 - Proceedings to report to competent authority at port.
 - Proceedings to communicate with other authorities.
 - Quarantine of suspected travellers.

Part B. Authorities for radiological or chemical events on ships or at ports at the EU.

- ☐ Radiological authorities were easier to identify than chemical.
- ☐ Competent authorities are usually not health authorities.
- ☐ Legislation and contingency plans are not specific for ships or ports.
- ☐ There is lack of training.

Part E. Inland waterways

- ☐ Development of international hygiene and sanitation guidelines for inland navigation vessels.
- ☐ Need for standardized training of European port health inspectors.
- ☐ Need for an improved exchange of information between port health authorities.

Acknowledgments: To the EU Commission for co-financing the Joint Action and to all participants from the EU and International institutions, the EU MS and the shipping industry.

This poster arises from the EU SHIPSAN ACT Joint Action. Sole responsibility lies with the author and the Consumers, Health, Agriculture and Food Executive Agency (CHAFEA) is not responsible for any use that may be made of the information contained therein.

Partners: 32 partners from 24 EUMS, European and international Institutions, shipping Industry. **Advisory Board:** DG SANTE, CHAFEA, ECDC, WHO, CDC-VSP. **Associated partners:** Regional Health Inspection-Varna, Bulgaria/Regional Health Inspection-Burgas, Bulgaria/Hamburg Port Health Center, Germany/Robert Koch-Institute, Germany/National School of Public Health, Greece/Directorate of Health, Centre for Health Security and Communication Diseases, Iceland/Health Service Executive, Ireland/Ministry of Health, Italy/Klaipeda Public Health Center, Lithuania/National Institute of Public Health, Slovenia/Instituto De Salud Carlos III, Spain/Public Health England, Centre for Radiation Chemical and Environmental Hazards, United Kingdom/Association of Port Health Authorities, United Kingdom. **Collaborating partners:** Ministry of Health, Austria/Federal Public Service of Health, Belgium/Ministry of Health and Social Welfare, Croatia/Ministry of Health, Cyprus/Centre of Maritime Health and Society, University of Southern Denmark/Health Board, Estonia/Ministry of Labour, Employment and Health, France/Minister for Health, the Elderly and Community Care, Malta/Municipal Health Services Rotterdam, Netherlands/National Institute for Health and the Environment, Netherlands/Norwegian Directorate of Health, Norway/Ministry of Health, Portugal/Medical University of Gdansk, Poland/Ministry of Health, Romania/Ministry of Health, social services and equality, Spain/Ministry of Transport, Construction and Regional Development of the Slovak Republic