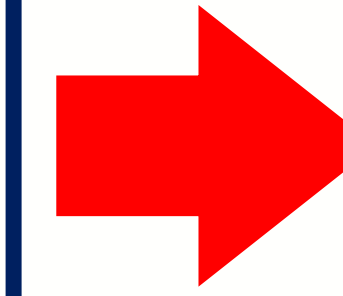


Participatory case definition between stakeholders and implication for early detection: a case study of the oyster production in France

Coralie Lupo ¹, Axel Osta Amigo ¹, Clara Marcé ², Jean Prou ¹

Background

- Aquatic animal health surveillance aims at early detecting the appearance of any exotic or emerging pathogen in the territorial waters, in order to react promptly to outbreaks and limit its spread. As diseased shellfish seldom show symptoms, **mortality** represents the only sign leading to **disease suspicion**. Thus, any observation of shellfish increased mortality must be **immediately notified by farmers to the local competent authority**.
- According to current European regulation (Directive 2006/88/EC), 'increased mortality' means *"unexplained mortalities significantly above the level of what is considered to be normal for the farm or mollusc farming area in question under the prevailing conditions. What is considered to be increased mortality shall be decided in cooperation between the farmer and the competent authority"*.



A mandatory participatory case definition: what reality on the field ? ?

Objectives:
(1) To explore the **interpretation of the shellfish 'increased mortality' definition among the stakeholders**
(2) To describe their **perceived aim of the mortality notification system**

Methods

- Population study: stakeholders of the oyster production (i.e. 120 oyster farmers, 2 local and 2 national competent authority representatives), Charente-Maritime department *
- Face-to-face interviews
- Content analysis to identify thematic categories in the responses

Reporting farmers (N=89)

Non-reporting farmers (N=31)

Case definition interpretation

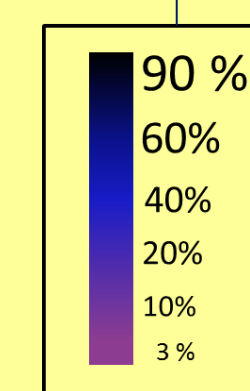


Local representatives (N=2)

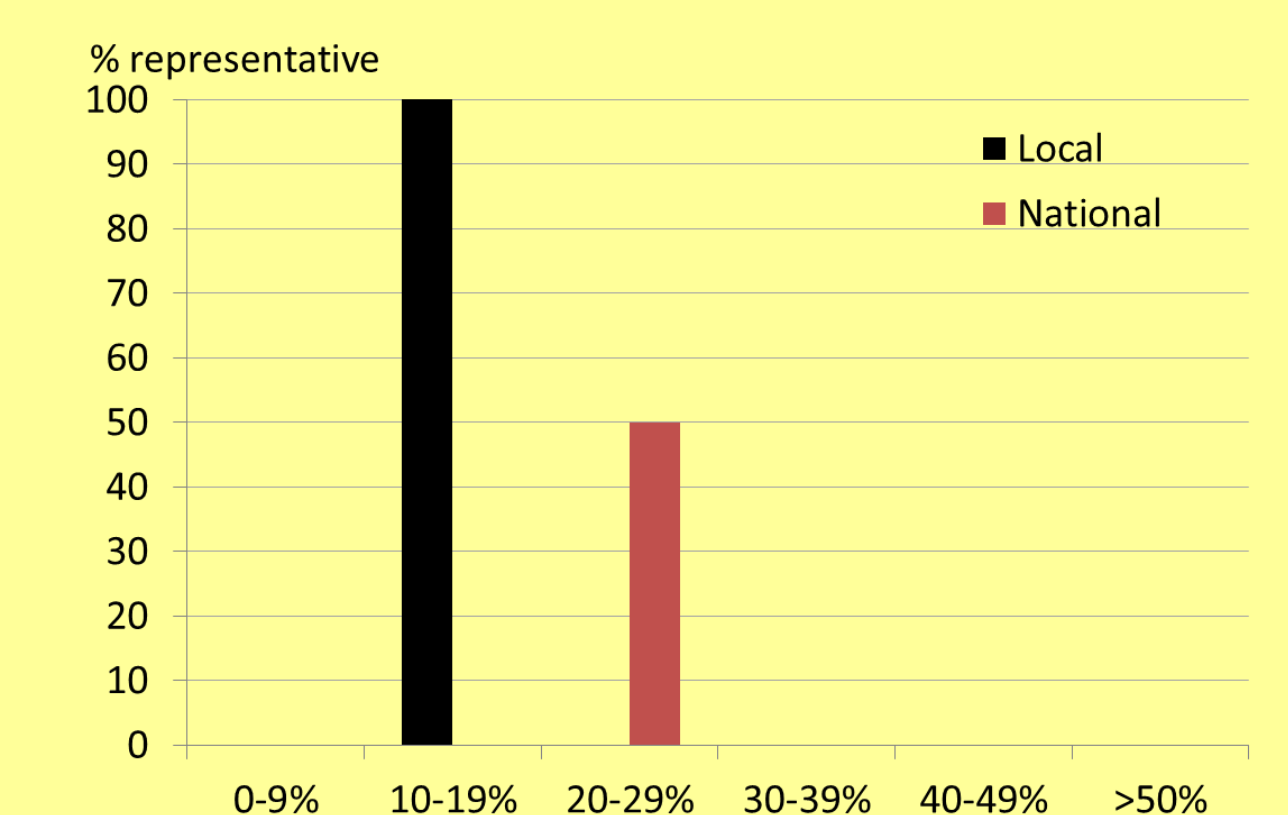
National representatives (N=2)

Counting dead oysters
Empty shell

Counting dead oysters
Empty shell



Threshold % for an 'increased' mortality:



Counting dead oysters

Dark water

Empty shell

White shell

Flesh in shell

Sticky

Nauseating odour

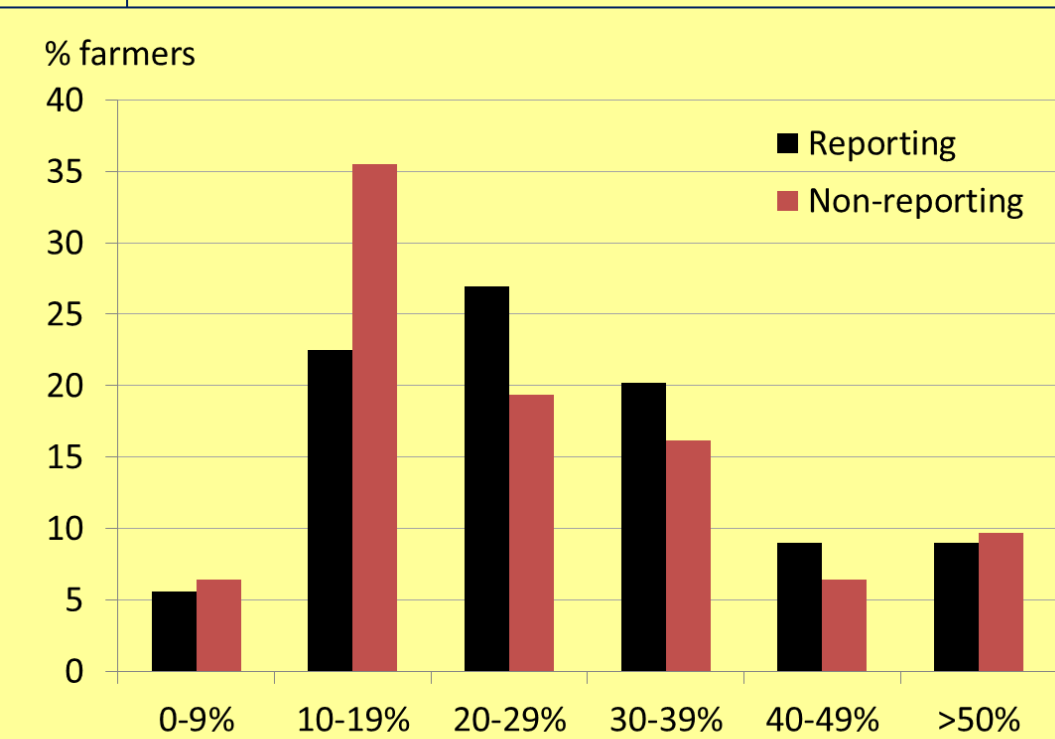
Specific noise when manipulating oyster bags

Dying oysters

Weak oysters

High growth just before mortality

No growth just before mortality



Reporting farmers (N=89)



Perception of the mortality notification system aim



Local representatives (N=2)

Obtain financial compensation

National representatives (N=2)

Shellfish health surveillance

Warning onset alert

Describe the mortality phenomenon

Informing policy measures

Informing other farmers

Obtain financial compensation

Shellfish health surveillance

Warning onset alert

Describe the mortality phenomenon

Useless

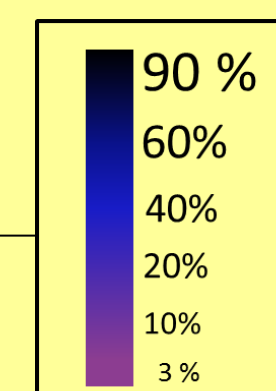
Find mitigation solutions

Understand the mortality phenomenon

Informing other farmers

Informing policy measures

Obtain financial compensation



Non-reporting farmers (N=31)

Useless

Describe the mortality phenomenon

Understand the mortality phenomenon

Informing other farmers

Obtain financial compensation

Perspectives

- Farmers are the first to detect oyster 'increased' mortality. Then the competent authority get involved for case validation.
- How to share representations between stakeholders, starting **from individual perceptions of abnormalities to a collective alert onset ?**
- Ownership and commitment towards shellfish surveillance of each stakeholder may be enhanced by **information, training, and better education**.

¹ IFREMER-French Research Institute for Exploitation of the Sea, La Tremblade, France
² Ministry of Agriculture, General Directorate for Food, Paris, France

* Lupo C., Osta Amigo, A., Mandard YV., Peroz C., Renault T. (submitted) Improving early detection of exotic or emergent oyster diseases in France: identifying factors associated with shellfish farmer reporting behaviour of oyster mortality.

Acknowledgements:

The authors thank the farmers and the representatives of the Competent authority for their participation in the study.