



POSTER

NOROVIRUS OCCURRENCE IN BATCHES OF BIVALVE MOLLUSCS IMPORTED FROM EUROPEAN UNION COUNTRIES: A RETROSPECTIVE STUDY

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Aim. This study evaluated the prevalence of Norovirus (NoV), a relevant virological hazard in raw bivalve molluscs, in products originating from European Union countries and marketed at Italian fish platforms between 2018 and 2025, analysing the association between NoV positivity, country of origin, European Community (EC) establishment of origin, viral genogroup, and seasonality. 2. **Methods:** A retrospective study was conducted on 219 samples belonging to 167 batches of bivalve molluscs. Detection of NoV genogroups I (GI) and II (GII) was performed by reverse transcription polymerase chain reaction (RT-PCR) according to ISO 15216-2:2019. Associations between variables were assessed using the chi-square test (χ^2 ; $p < 0.05$).

Results. Overall, 22% (48/219) of samples tested positive for at least one NoV genogroup; all positive samples were Pacific oysters (*Crassostrea gigas*). NoV-GII was the most frequently detected genogroup (9.5%), followed by NoV-GI+NoV-GII co-detection (6.4%) and NoV-GI alone (6.0%). Positivity was significantly associated with the EC establish-

ment of origin ($p < 0.001$), with recurring positive results identified in specific establishments, and with seasonality ($p = 0.005$), showing a marked concentration of cases in spring and no positive results during summer. Molluscs originated from France and the Netherlands; however, no statistically significant association was observed between country of origin and NoV positivity ($p = 0.05$), nor between seasonality and viral genogroup ($p = 0.08$).

Conclusions. The results confirm the role of oysters as an important vehicle for NoV transmission. The identification of establishments with recurring positive results and the clear seasonal distribution support the need to implement risk-based virological surveillance programmes, integrated with epidemiological, environmental, climatic and infrastructural data, such as the location of sewage networks, water supply systems and depuration plants. This approach would enable a more effective risk assessment, supporting the adoption of more targeted management strategies to protect public health and ensure the safety of bivalve mollusc products intended for human consumption.