

ADVISORY COMMITTEE ON THE MICROBIOLOGICAL SAFETY OF FOOD

INFORMATION PAPER

**INVESTIGATION INTO THE PREVALENCE, DISTRIBUTION AND LEVELS
OF NOROVIRUS IN OYSTER HARVESTING AREAS IN THE UK**

A report on the prevalence, distribution and levels of norovirus in oyster harvesting areas in the UK was published by the FSA in November 2011.

Between 2009 and 2011, scientists from the Centre for Environment, Fisheries and Aquaculture Science (Cefas), on behalf of the Food Standards Agency, took samples from 39 oyster harvesting areas across the UK. More than 800 samples of 10 oysters each were tested.

The study found that 76% of oysters tested from UK oyster growing beds were positive for norovirus. The levels of norovirus genetic material detected varied widely, although more than half of the positive results (52%) contained low levels of viral RNA. Seasonal and geographical variations were seen in the data.

It is difficult to assess the potential health impact of these findings, as the available detection methods are not able to differentiate between infectious and non-infectious norovirus within the oysters and as an acceptable limit for norovirus in oysters has not yet been established. In addition, the samples of oysters used in this study were collected from the oyster beds and tested before any further processing such as depurationⁱ or relayingⁱⁱ. Levels of norovirus in oysters collected from the bed may therefore not be representative of levels in the final product.

The study is the first stage in a process to better understand the risks posed by norovirus in the food chain and the controls that could be put in place to deal with them. The results have informed a European Food Safety Authority scientific opinion on detection methods, limits and control options for norovirus in oysters to be published in January 2012. Ultimately we expect this work to contribute towards the development of a European standard for an acceptable limit for norovirus in oysters.

The full report can be found on the Agency's open access repository foodbase at:

http://www.foodbase.org.uk//admintools/reportdocuments/728-1-1238_P01009_norovirus_surveillance_FINAL_report.pdf

The FSA issued a news release to accompany publication of the report (<http://www.food.gov.uk/news/newsarchive/2011/nov/norovirus>) and the Agency's Chief Scientist has posted further commentary on his blog (http://blogs.food.gov.uk/science/entry/when_it_comes_to_norovirus).

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ⁱ Depuration is a purification process used commercially and regulated by the Food Standards Agency. It is commonly used by producers to reduce or eliminate microbiological contamination in oysters and other shellfish. Shellfish are placed in tanks of clean re-circulating seawater, treated by UV irradiation, and allowed to purge their contaminants over several days. In the UK a minimum purification time of 42 hours is required.

ⁱⁱ Re-laying is a purification process used to treat bivalve shellfish. Shellfish are harvested from a contaminated area and moved to clean areas, where they are placed on the ocean floor or into containers laid on the ocean floor, or suspended in racks. Re-laying will generally be for at least two months.