

Trends in the shellfish water quality in OSPAR coastal waters

Very little information exists on the trends in shellfish water quality. Only limited compilations of data are available (e.g., Charting progress – An integrated assessment of the state of UK seas – www.defra.gov.uk) on location and percentage of quality waters (A, B and C according EU regulation). Therefore no report was done concerning the possible improvement or degradation of the production areas.

In France, a sanitary survey from the national microbiological monitoring network REMI demonstrated a stability of the shellfish areas classification (www.ifremer/envilt/fr). When the Urban Waste Water Treatment Plant Directive (91/271/EEC) was implemented a real improvement of shellfish quality was observed. Since then, no real improvement or degradation has been observed in recent years on shellfish quality (e.g. Bay of Morlaix Figure 4.2). Moreover, the REMI survey demonstrated the sensibility of production areas to meteorological events and to related diffuse pollution.

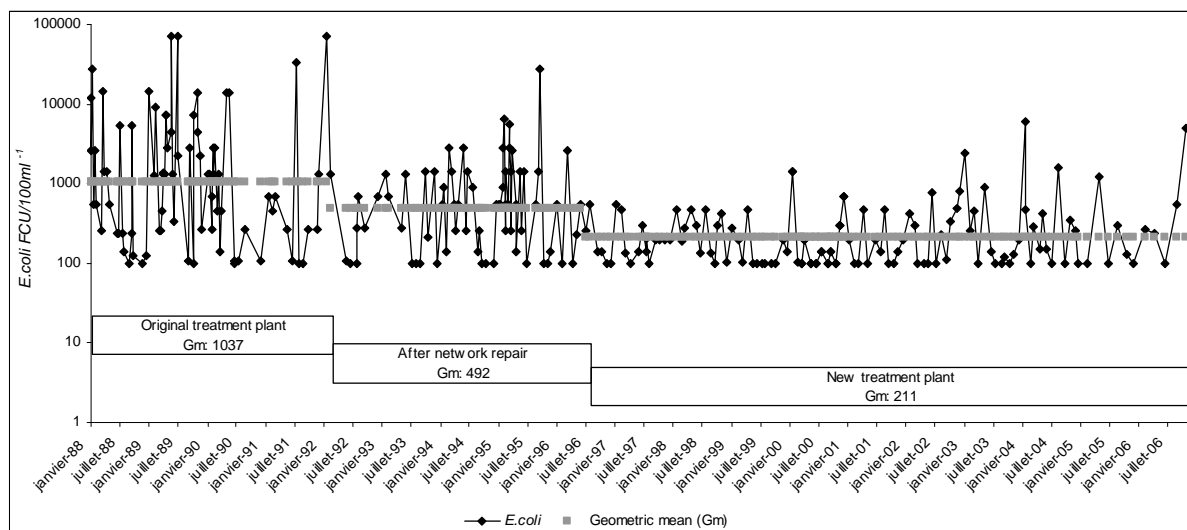


Figure 4.2 Effect of setting up equipment on shellfish quality, Morlaix, France. Ref. REMI network, Ifremer data: www.ifremer.fr/envilt/

The current controls have been effective at reducing the risk of bacteriological illness to minimal levels. However, despite the legal controls shellfish outbreaks are currently reported by the “Rapid Alert System for Food and Feed” (www.ec.europa.eu/food/food/rapidalert/archive_en.htm), the « Foodborne Virus in Europe network » (www.eufoodborneviruses.co.uk) and the « Eurosurveillance » network www.eurosurveillance.org.

The European regulation on microbiological criteria for shellfish quality stipulates legal control based on the traditional bacterial indicators (*Escherichia coli*). However *Escherichia coli* indicator does not perform well for viruses, the main micro-organism involved in shellfish associated outbreaks in Europe. Thus many outbreaks, even recently have been associated with shellfish fully compliant with legal bacteriological standards. In some outbreaks, multiple strains of a single virus such as NoV can be detected indicating sewage or faecal contamination. Analysis of shellfish events leading to shellfish-related outbreaks has confirmed this hypothesis, and when environmental data are available, sewage-related contamination is often demonstrated.

➔ Go to full QSR assessment report on the impacts of microbiological contamination on the marine environment of the North-East Atlantic (publication number 466/2009)