

Media Release

Paralytic Shellfish Poisoning Incidents

- **Low level of risk to beach users and their pets, although simple precautions are recommended**
- **No risk to people or pets from seawater**
- **Latest testing on species including crabs and whelks finds that toxin levels are below regulatory limits**
- **Appeal for owners of pets that have become ill after consuming items on a beach to report it to the relevant District or Borough Council**

It can now be confirmed that the death of a Siberian Husky after eating a shore crab at Felixstowe Ferry, Suffolk, earlier this month is highly likely to have been because of Paralytic Shellfish Poisoning. This follows similar findings in relation to the Golden Retriever that died after eating fish on the beach at Cley in North Norfolk on New Year's Eve. Paralytic Shellfish Poison (PSP) is a naturally occurring marine biotoxin.

Testing carried out by the Centre for Environment, Fisheries and Aquaculture Science (Cefas) found high concentrations of PSP toxins in starfish (1,500 micrograms [PSP] per kilogramme of tissue tested) and dab (566 [PSP] per kilogramme of tissue tested) connected with the incident at Cley.

Very high concentrations were found in starfish (15,000 to 22,000 micrograms [PSP] per kilogramme of tissue tested) and partially digested shore crab (2,500 to 3,500 micrograms [PSP] per kilogramme of tissue tested) connected with the incident at Felixstowe Ferry.

To put this into context, the EU Regulatory maximum level for PSP toxins permitted in live bivalve molluscs is 800 micrograms [PSP] per kilogramme of tissue tested.

Analysis of pathological samples and symptomology of the affected dogs also indicates that their deaths were likely to have been a consequence of ingesting PSP-contaminated [marine] animals.

PSP toxins are primarily associated with bivalve molluscs such as mussels, clams, oysters and scallops. These are filter feeders and can accumulate PSP toxins, which are produced naturally by certain species of microscopic algae. Algal blooms do not usually occur during winter months in the UK and the source of the contamination is being investigated.

Recent analysis of bivalve mollusc and water samples, collected through the Official Control monitoring programme, have been negative for PSP and the algae associated with PSP production in the UK (*Alexandrium* spp.).

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Testing last week on a variety of marine species, including brown/edible crab, spider crabs, shore crabs, velvet swimming crabs, dab and whelks from North Norfolk and Suffolk, have revealed low levels of PSP toxin in some of the samples and no PSP at detectable levels in others. PSP Toxins around the regulatory limit for bivalve molluscs were found in one sunstar starfish.

It is thought that the contaminated animals were washed up on beaches during winter storms and are likely to have now been washed back into the sea.

Eastern Inshore Fisheries and Conservation Authority (Eastern IFCA) is co-ordinating the activity of relevant agencies in seeking to establish the source and extent of the PSP contamination. The agencies involved include Cefas, the Food Standards Agency, Local Authority Environmental Health departments, the Marine Management Organisation and the Environment Agency.

The CEO of Eastern IFCA, Julian Gregory, said: 'It is important that we take a measured and joined-up approach in working to find out what the extent of PSP contamination may be. At this point there is nothing to indicate that species sold for human consumption such as brown crabs or lobster are affected but as a precautionary measure we are sampling a range of marine animals to ensure that any on-going PSP contamination is identified.'

There is no risk from the presence of PSP toxins in seawater, and the test results from sampling undertaken so far does not indicate that such contamination currently exists. Recreational users of the coast, in particular dog walkers, are advised to take simple precautions to prevent their pets from consuming anything found on a beach. Whilst walking on the coast, these may include keeping their pets under close control, on leads or muzzled, if considered appropriate.

Dr Andrew Turner, from Cefas, said: 'There is no risk to people or animals from the seawater. The only risk is from ingesting PSP-contaminated animals found on the beach, so simple precautions should be followed to ensure that pets and people do not eat anything they find on the beach.'

Analysis of the Dab associated with the incident at Cley indicates that it was contaminated with PSP, albeit at a level below the regulatory maximum allowed. Recreational sea anglers, who often fish for this species at this time of year, may wish to return their catch to the sea and avoid retaining it for consumption as a precautionary measure.

Owners of pets that have become ill after consuming items on a beach are asked to report the matter to the District or Borough Council for the area where the incident occurred.

Note to Editors

PSP toxins are primarily associated with bivalve molluscs such as mussels, clams, oysters and scallops. These are filter feeders and can accumulate the potent neurotoxins, all related to the parent compound saxitoxin, which are produced

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naturally by certain species of microscopic algae. Dinoflagellates of the genus *Alexandrium* are the most widespread saxitoxin producers. Algae blooms do not usually occur during winter months in the UK.

The routine monitoring for the presence of toxin producing plankton in shellfish production and relaying areas, and biotoxins in bivalve molluscs, is a requirement of Regulation (EC) No 854/2004, which sets out official controls on products of animal origin intended for human consumption.

The Food Standards Agency (FSA) is the body with overall responsibility for the official monitoring programme for marine biotoxins in live bivalve molluscs. The monitoring programme involves testing bivalve molluscs such as Oysters, Mussels, Cockles etc and water from classified production areas. Where permitted levels are exceeded, the harvesting area is closed until levels are within permitted again.

Cefas is the contracted laboratory responsible for the analysis of both water and flesh samples. Local Authorities (District Councils within the Eastern IFCA District) are responsible for collecting water and shellfish samples at the required frequency from the designated sites and for sending these to the testing laboratory.

Water samples are analysed for the presence of potentially harmful algal (phytoplankton) species associated with marine biotoxins which include Amnesic Shellfish Poisoning (ASP) toxins, lipophilic toxins (including Diarrhetic Shellfish Poisons (DSP) and PSP toxins. Bivalve mollusc samples are analysed for these toxins using a range of chemical detection methods.

Laboratory testing for PSP in starfish, fish and shore crabs is not validated and accredited in the Cefas Laboratory (Weymouth) however, two independent tests were conducted and the majority of results indicate a high likelihood that results for these marine animals are accurate.

PSP toxins would not ordinarily be expected in species other than filter feeders unless they predate on filter feeders. In such cases toxins can bioaccumulate and in the case of *Cancer pagurus* (commonly known as edible/brown crab) and lobster, toxins generally accumulate in the hepatopancreas. Such cases are relatively rare, although there are reported incidents around the world.

The CEO of Eastern IFCA, Julian Gregory, is the lead officer responsible for coordinating the activity of agencies involved in dealing with this event.

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