

Media Release: Reports of dog illnesses on Norfolk beaches

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Summary

- **Reports of dogs becoming ill as a result of eating items (dead animals) washed up on Hunstanton beach**
- **Previous incidents in 2018 linked to paralytic shellfish toxins in items washed up on East Anglian beaches during winter storms**
- **Pet owners are advised to take precautions to prevent dogs from eating items washed up on beaches in Suffolk, Norfolk and Lincolnshire**

In early 2018, Eastern IFCA coordinated the response to managing the emergence of Paralytic Shellfish Toxins (PST) in marine items washed up in large numbers on East Anglian beaches. PST cause paralytic shellfish poisoning (PSP), which can be fatal to dogs, as was seen in at least two cases in 2018, along with several other serious illnesses in dogs.

PST are typically associated with bivalve molluscs such as mussels, clams, oysters and scallops. These are filter feeders and can accumulate PST, which are produced naturally by certain species of microscopic algae. The emergence of PST in starfish and other washed up marine organisms eaten by dogs was novel to the UK in 2018, as was its timing given that algae typically bloom in spring and autumn.

On 16th April 2020, social media posts alerted Eastern IFCA to a potential new case of PSP in a dog at Hunstanton. This coincided with earlier reports of large numbers of marine organisms being washed up on Norfolk beaches. The dog's reported symptoms align with PSP and Eastern IFCA are coordinating a response, accordingly, including arranging for Cefas to carry out any required testing.

As a precaution it is suggested that dogs are kept under close control, on leads or muzzled to prevent them consuming anything on the beach. In addition, people should avoid handling starfish and other stranded marine animals. Further advice for vets and pet owners has been developed by Cefas and is available on the [Eastern IFCA website](#).

Ends

Note to Editors

PSP (Paralytic Shellfish Poisoning) 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 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. This monitoring programme involves testing bivalve molluscs, including oysters, mussels, cockles, and water samples from classified production areas. Where permitted levels are exceeded, the harvesting area is closed until they are within permitted levels 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.

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 the edible crab (*Cancer pagurus*) and European lobster, toxins generally accumulate in the hepatopancreas. Such cases are relatively rare, although there are reported incidents around the world.

Operation Blake

Operation Blake is the multi-agency response that was set up following the incidents in 2018 and now monitors levels of PST in marine animals around East Anglia. Immediately after the dog illnesses and deaths in 2018, samples of flatfish, starfish and crabs collected from the beaches of the affected areas were analysed for naturally occurring marine neurotoxins. The toxins that cause PSP were detected and quantified using two independent chemical testing methods in samples of all three species. Following on from this, Eastern IFCA coordinated the activity of relevant agencies in seeking to establish the source and extent of PST contamination. The agencies involved included Cefas, the FSA, local authority environmental health departments, the Marine Management Organisation (MMO) and the Environment Agency. The

primary focus of this multi-agency response to the incidences was the protection of the public from any unexpected risk posed by PST to human health.

In February 2019, Eastern IFCA received an offer of funding from the European Maritime and Fisheries Fund, administered by the MMO, to continue to develop the project to assess the risk of unexpected paralytic shellfish toxins in commercial non-mollusc shellfish species.

In developing the EMFF-funded monitoring programme, it was recognised that the laboratory tests being used to quantify toxicity remained unvalidated in non-bivalve shellfish due to the lack of a requirement for routine analysis of such matrices. The objective to validate two independent tests for detecting PST in non-bivalves in a UK laboratory was therefore set as part of the funding bid for this project, and Cefas have worked quickly over the last year to meet this objective.

This funding has so far enabled over 100 samples to be analysed for toxins by Cefas, substantial progress to be made towards validating the tests used for detecting PST in non-bivalve shellfish and work towards establishing the source of PST begun using samples collected on two Cefas deep-sea benthic cruises and grab surveys undertaken by Eastern IFCA.

The laboratory-based validation work has now been completed. A limited amount of further data analysis remains to be completed before the findings of the validation work can be written up into a full validation report. The intention is for the findings of the validation work to be written into a full report over the coming months, before Cefas will look to publish the peer-reviewed methods and will consider working with the United Kingdom Accreditation Service to have the methods formally accredited.

The sampling programme has detected potentially dangerous levels of toxins in some samples, in particular certain types of starfish, however **all routine samples of crabs, whelks and shrimps tested thus far in the programme have indicated that there is no current risk to the human food chain.**

Media contacts and enquiries

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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