

Annex A – Norovirus Sample Submission Instructions

Types and condition of shellfish accepted for testing

Samples must be submitted as either live or frozen shellfish, and in all cases must be uncooked, unprocessed and unshucked.

Prior to submitting live shellfish, mud and sediment adhering to the shellfish should be removed (where possible). This is best achieved by rinsing/scrubbing with clean sea water or freshwater of potable quality. If these are not available, the seawater from the immediate area of sampling may be used instead. Do not totally re-immerses the shellfish in water as this may cause them to open. Allow them to drain before placing in the sample container.

Samples should arrive at the laboratory in good condition (opened, gaping or damaged shells should not be included in the sample). Samples should only consist of animals that are within the normal commercial size range. Immature/juvenile animals may provide results that are unrepresentative of mature stock harvested for human consumption.

The laboratory will only accept and test the following shellfish types. We ask that for each analysis you submit the number of individual shellfish stipulated in the table below. As a minimum, we will require the following:

Species	Scientific name	Minimum number recommended
Pacific Oysters	<i>Magallana (Crassostrea) gigas</i>	12
Native Oysters	<i>Ostrea edulis</i>	12
Mussels	<i>Mytilus</i> spp.	12
King Scallops	<i>Pecten maximus</i>	12
Queen Scallops	<i>Aequipecten opercularis</i>	12
Cockles	<i>Cerastoderma</i> spp.	24
Hard Clams	<i>Mercenaria mercenaria</i>	12
Palourdes	<i>Ruditapes (Tapes) decussatus</i>	12
Manila Clams	<i>Ruditapes (Tapes) philippinarum</i>	12
Surf Clams	<i>Spisula solida</i>	24

Important notes:

- The laboratory will only accept and test the species of bivalve shellfish indicated in the table above. Sample(s) consisting of other species of bivalve shellfish will be rejected on arrival, unless exception has been agreed with Cefas in advance of the sample(s) being submitted.
- To enable testing to be carried out in compliance with the international standard method ISO 15216-1:2017, we require a minimum sample size of 10 animals. To allow for removal of animals in poor condition prior to testing we recommend submitting at least 12 animals. In addition, a minimum of 2g of digestive tissues is required for testing according to ISO 15216-1:2017 – for smaller species a larger number of animals may be required. Recommended numbers of bivalve shellfish animals to submit for each species are shown in the table above.
- If insufficient animals are available to submit, testing may still be possible subject to prior arrangement with Cefas. For advice, please contact cst@cefas.co.uk before shipping material.

Packaging and Transport

Customers should send samples using an overnight courier service to ensure that samples arrive at the laboratory in a suitable condition for testing. Ideally for live shellfish, samples should be transported in a cool box or similar and kept between 1 to 10°C during transit. If frozen, samples should be transported in a way that guarantees they do not defrost in transit.

Packaging Guidance

Shellfish to be tested should be placed inside a polythene bag, which is then securely tied (double bagging is recommended to prevent puncture of the bag(s) by the shells). The Sample Submission Form must be fully filled in and placed inside a separate polythene bag and secured to the sample. Both shellfish sample and information sheet should be placed inside the shipping box.

Care must be taken to correctly place any additional cool packs to ensure the shellfish sample does not come into direct contact with the cool pack(s). Should one sample not fit into one box, please split the sample into two boxes, ensuring that each sample is accompanied by a Sample Submission Form (marked 1 of 2 and 2 of 2).

If submitting more than one sample in the same shipping box, each sample must be accompanied by its own Sample Submission Form. Care should be taken to ensure the Sample Submission Form remains attached to the relevant sample so that samples are easily identifiable on arrival at the laboratory.

Once correctly assembled, secure the shipping box lid with adhesive tape to prevent leakage and send the sample via Royal Mail Special Delivery or similar carriers/couriers.

Samples must be delivered to the laboratory as soon as possible and preferably within 24 hours of collection. If short term (up to 24h only) storage prior to dispatch/delivery is necessary, samples should be stored between 2 and 8°C. For longer term storage, if necessary, samples can be frozen.

Important notes:

Please note, the laboratory does not return transport boxes provided by the customer, unless agreed in advance with the customer. Please note a charge will apply (please consult rate card price list). Cefas will not be held liable for the condition of the transport box once the courier has received it. Any issues relating to damages should be raised with the courier in question.

- **Submission to the laboratory**

Each individual sample must be accompanied with a completed Sample Submission Form. Unlabelled samples arriving at the laboratory with incomplete paperwork or those in poor condition will not be tested.

Samples should be addressed to:

**Cefas Shellfish Testing
Molecular Virology Laboratory
Barrack Road
Weymouth
Dorset
DT4 8UB
UK**

It is requested that, where possible, a minimum of one weeks' notice is provided to the laboratory prior to sample submission. If the service's monthly testing capacity has already been reached, customers will be advised not to send samples in for testing. Notice should be in writing to cst@cefas.co.uk. It is also recommended that you advise the laboratory by emailing cst@cefas.co.uk when samples are posted as this will help staff identify which samples are due and whether these have been delayed in the post.

For samples to be included in the monthly schedule, we ask that samples arrive at the laboratory by the cut off, 12:00 midday, on the identified submission deadline day each month (first or second Wednesday in the month – see below). Samples received after the cut off may be included in the monthly schedule if it is possible for Cefas to do so without impacting turnaround targets for other customers. Please note, this will be at the discretion of Cefas. If this is not possible, customers will be contacted and will be provided with the options to have samples stored according to standard lab procedures and then tested in the schedule for the following month or, to have samples discarded without testing, free of charge.

Important notes:

Please note that the laboratory is closed on bank holidays and for two weeks during the Christmas period

Reporting:

Results will be reported electronically to the contact person whose details are provided on the Sample Submission Form. If you require the results to be sent to additional or different contacts, arrangements must be agreed in advance. Please indicate this on the form or contact cst@cefas.co.uk. Samples must be received at the laboratory by 12:00pm on the monthly sample submission deadline day (1st or 2nd Wednesday in the month; October 12th 2022, November 9th 2022, December 7th 2022, January 11th 2023, February 8th 2023, March 8th 2023) to be included in the monthly sampling run. Results for samples included in the monthly sampling run will be reported within 6 working days of the submission deadline (October 20th 2022, November 17th 2022, December 15th 2022, January 19th 2023, February 16th 2023, March 16th 2023) subject to satisfactory quality control results.

Sample Retests:

In the event of a retest being required due to quality control issues, reporting within 6 working days of the submission deadline may not be possible. In this instance, the customer will be asked whether they want to proceed with the retest (at no extra cost) or to cancel the test (no fee will be charged). If samples fail quality control on a second attempt, the customer will be charged for the full price of the testing service.

NOTE: samples may fail quality control for a number of reasons including inherent properties (e.g., presence of high levels of PCR inhibitors).

ANNEX 2: SAMPLE SUBMISSION FORM

Your reference:		This reference must be unique to your sample. Please ensure that you do not provide information on the exact geographical origin of your sample		
Contact name:				
Sender's address:				
Contact phone number(s):	Landline:		Mobile:	
Reporting email:				
Date & time of collection:		Date of dispatch:		

Tick box for analyses required:

Bivalve species	Norovirus test
Pacific Oysters (<i>Magallana (Crassostrea) gigas</i>)	<input type="checkbox"/>
Native Oysters (<i>Ostrea edulis</i>)	<input type="checkbox"/>
Mussels (<i>Mytilus spp.</i>)	<input type="checkbox"/>
King scallops (<i>Pecten maximus</i>)	<input type="checkbox"/>
Queen scallops (<i>Aequipecten opercularis</i>)	<input type="checkbox"/>
Cockles (<i>Cerastoderma spp.</i>)	<input type="checkbox"/>
Hard clams (<i>Mercenaria mercenaria</i>)	<input type="checkbox"/>
Palourdes (<i>Ruditapes (Tapes) decussatus</i>)	<input type="checkbox"/>
Manila clams (<i>Ruditapes (Tapes) philippinarum</i>)	<input type="checkbox"/>
Surf clams (<i>Spisula solida</i>)	<input type="checkbox"/>
Other species - by prior request only	<input type="checkbox"/>