MSX – Frequently Asked Questions

What is MSX?

Please see fact sheet (attached) for details about MSX including clinical signs, necropsy, diagnosis and control, transmission and federal government links.

Are there any risks to human health?

There are no known human health risks. Oysters remain safe, nutritious and delicious to eat.

What should members of the oyster industry be looking out for?

Higher than normal mortalities will likely be the first sign. Typically, MSX impacts oysters that are 2 years or older. Losses can be as high as 90-95% mortality in older stocks. You may see gaping, fouling and pockets of brown on the mantle. The pathogen likes warm temperatures and high salinities, so conditions are prime at the end of July through August.

What should I do if I see higher than normal mortalities in my oysters?

Please email the Aquaculture Division at msx@gov.pe.ca to report any shellfish mortality event. We will follow up with a mortality investigation that includes gathering pertinent information and sampling.

What should we do with oysters from the infected area? Will this area be closed for the rest of the season? Year?

The CFIA will provide further guidance on the area where the pathogen was found. This answer will be updated as more information becomes available.

When will additional sampling be done? Who will do the additional sampling?

Additional sampling is already underway and will be done in partnership with the province, DFO and CFIA. We ask for everyone’s full cooperation so we can complete this critical sampling as quickly and smoothly as possible.
**How long does it take to get laboratory results?**

The length of time for results depends on the laboratory, the testing requested and the capacity at the laboratory. The histology samples can take a few days for processing and analysis. Polymerase Chain Reaction, or PCR (a test to directly and quickly test for a specific thing, such as a pathogen) results can be turned around in several hours after shipping and prep is complete (1-2 days). We will be working on supporting additional lab capacity in the coming days.

**Should we expect any trade impacts associated with MSX?**

While we can’t say with 100% certainty, trade impacts are expected to be minimal. MSX is not required to be reported to the World Organization for Animal Health (WOAH) and is not a reportable disease in the United States. MSX has been found from Florida to Maine and is in the Bras d’Or Lakes of Cape Breton, NS. The majority of Canada’s current oyster importing countries do not have any rules concerning MSX when oysters are going for human consumption as it is NOT a food safety issue.

**What steps should I take to disinfect my boat/equipment?**

MSX will not survive in freshwater. Properly applied disinfectants are likely to work to kill the organism. Specific studies have not been published that describe the use of disinfectants against MSX. Always ensure that your gear is clean and disinfected when you go from site to site as per usual good industry standards.

The organism removed from saltwater is expected to have short survival times when they are subjected to drying and sunlight (heat and UV irradiation) or in the case of winter, sub-zero temperatures.

**How did MSX get to Bedeque Bay?**

Unfortunately, we are not able to determine the origin at this time. A full investigation is underway and as more information becomes available it will be shared.

**What impacts will this have on oyster movements/sales? Can we move seed?**

While the details are still to be determined, it would be good to anticipate that there will likely be movement restrictions placed on certain areas, until the extent of the infection is determined. It is important not to spread disease through movement.

**Will this impact current or future Introductions and Transfers (I&T) permits?**

While the details are still to be determined, it should be anticipated that there will likely be impacts to I&T permits until the extent of the infection is determined. It is important to consider the risk of spreading disease through the movement of shellfish.
What steps can be taken to mitigate the risks of further spread?

Avoiding the movement of oysters or using your vessels in different areas until the extent of the infection is determined will help prevent further spread. There is still much to learn about this current situation and the investigation and additional sampling is ongoing. Please stay tuned for future updates and submit any questions you have to msx@gov.pe.ca.

Can we send out product direct to a laboratory to determine if our oysters are infected? Do you have any guidance on which labs to use?

At this time, the CFIA designated laboratory is focused on sampling the priority samples associated with this investigation. If you would like to have some product tested, please contact msx@gov.pe.ca to discuss what options may exist.

Will this impact mussel movements?

CFIA will be coming forward with some information regarding the movements that will or will not be permitted from Bedeque Bay. Avoiding any unnecessary movement of shellfish and vessels until the extent of the infection can be determined would help prevent the spread of the organism.

Have mussels been documented to carry MSX?

Wild mussels growing in an area where MSX was present were examined and the pathogen was not visually detected, so mussels are not believed to be a host for MSX. However, much remains unknown about the transfer of MSX between shellfish.

Can we get rid of MSX? What options do we have?

To date it has not been possible to eradicate the organism in other locations where it has been found. The province will be looking at lessons learned from other impacted areas so we can learn the best tools and ways to support industry in the coming days, weeks, months and years. The province is reaching out to colleagues in other regions for Best Practices, laboratory capacity, and guidance on options for industry production practices.

What compensation or government support will be available for industry?

The province is in discussions to determine how best to provide support to industry at this crucial time.

Can we ever fish in an infected area again?

We are hopeful that a long-term strategy will be developed based on successes from other areas with MSX. At this time, we are focused on determining the extent of implicated areas.
Can PEI make resistant stock?

The province will collaborate with partners to learn about “MSX-tolerant” oysters. This is a priority.