

# Pacific Oyster Mortality Syndrome: Question & Answer Fact Sheet



(Long Version)

## 1. What is POMS?

Pacific Oyster Mortality Syndrome (POMS) is the name that has been given to Pacific oyster mortalities associated with the virus *Ostreid herpesvirus-1 microvariant (OsHV-1 μVar)* in Australia.

The virus has been associated with high mortality events (often brought on by environmental or handling stress) involving the Pacific oyster (*Crassostrea gigas*) in Europe, New Zealand and NSW.

All ages of Pacific Oysters may be affected, but spat and juvenile oysters often suffer higher mortalities. To date there is no evidence of POMS affecting any other oyster species.

## 2. How serious is the disease?

The disease is **very serious**; it has resulted in the complete loss of farm stock in some areas together with restriction of oyster movements.

Restrictions imposed on affected areas means that no oysters, parts of oysters or oyster equipment can be moved from these locations to other areas. Significant economic losses caused by mortalities have been experienced by affected farms.

There is a **potential high future impact** in Australia since the disease represents a major threat to the ongoing viability of the industry.

## 3. Where is the disease now?

In [France](#) higher mortalities were first reported in 2008 and have continued into 2011. The [UK](#), Jersey, Ireland and the Netherlands have all suffered recent mortalities.

In [New Zealand](#) the disease was confirmed in late 2010. The virus appears to be widespread in the northern part of the North Island.

In Australia, mortalities occurred in two estuaries in [NSW](#) (Botany Bay and Port Jackson) in late 2010. After extensive testing in NSW, SA and Tasmania it appears to be limited to these two estuaries. Nearly all of the cultivated Pacific oysters in the Georges River (Botany Bay) have died.

## 4. Is POMS a human health risk?

**There is no evidence that the virus can infect humans.** The virus has only been reported to affect Pacific oysters and cannot be transmitted to humans.

There is no food safety or human health issues related to the [POMS event in NSW](#). The NSW Food Authority assures consumers that the stringent safeguards in place under the [NSW Shellfish Program](#) ensures oysters destined for sale for human consumption from NSW are safe to eat.

## 5. How is the virus spread?

How the disease is spread is still not clear. Very little objective information is available about the major factors responsible for the outbreaks. It is *theorized* that international spread of the disease *may* have taken place in association with biofouling (e.g. oysters) attached to the hulls of ships.

Within France and New Zealand **spread is most likely to have occurred through the movement of live infected oysters to uninfected areas** (although spread by movement of equipment is also possible).

The virus is often inactive in cooler waters (below about 17°C). It is possible for oysters to be carrying the virus and not get sick until the water temperature rises or the oysters are subjected to environmental or handling stress.

Transmission over small distances is likely to occur through the movement of particles suspended in the water column.

## **6. What should I do if I have a mortality event on my farm?**

The virus has been placed on the [national list](#) and is thus reportable in all states. Under state Acts, if there is suspicion of POMS on a farm it is required by law to be reported to government; 24 hour emergency disease hotlines for such purposes are detailed below.

Under license conditions, **growers are required to report high or unexplained mortalities** on their farms. Mortalities should be ***immediately reported*** so that testing can occur to identify the cause.

If you notice high oyster mortality, you should ***immediately stop any movement of oysters*** and associated gear and equipment. Get your oysters tested ASAP and follow industry and regulatory protocols.

***Until the cause of any high mortality is identified, you should assume that it could be POMS and you should act accordingly to safeguard your industry.***

## **7. How can its spread be controlled?**

Farmer reporting of mortalities is the main system used to identify new outbreaks and greatly assists in controlling the spread of POMS. **Remember: Report any mortalities or risks *immediately*.**

If the disease is detected in an area, state restrictions regarding the movement of oysters, oyster farming materials and associated equipment are likely to be imposed until the full extent of the virus is ascertained.

Government veterinary laboratories can usually rule out POMS as the potential cause within a few days of receiving samples. Local state veterinary or fisheries agencies (see contacts below) will be able to assist with the submission of samples to relevant laboratories.

If the virus is detected, cease all translocations immediately amongst all growing areas in your state.

## **8. Should growers be monitoring for POMS?**

A national surveillance program has taken place regarding POMS (the results of which will help with future management options for the industry), however all growers must be vigilant in looking out for oyster mortalities and must report any unusual events as soon as possible.

Advice is available on monitoring and surveillance for POMS (see industry contacts below).

## **9. What is being done to limit the spread of the disease?**

Each state has established processes to assist industry in the prevention and spread of POMS. National monitoring has occurred and biosecurity and emergency response plans are established in each state.

Currently oyster and equipment movement restrictions apply within NSW; however these restrictions also affect oyster movement between states.

New regulations prohibit the importation of whole oysters into [Tasmania](#) from all states or territories; in addition, oysters in the half shell originating from NSW may not be brought into the state.

## 10. How should I prepare my business in the case that my oysters are affected by POMS?

Developing a POMS risk management plan for your business is recommended. Be prepared.

Your business should be prepared to answer contingency questions such as: if my farm is affected by POMS and severe restrictions on the movement of oysters from that area are imposed, what would this mean for my business?; what is my business plan to manage a POMS event and ensure my business's long term financial survival?; and where can I get risk management advice? See industry contacts below for assistance.

## 11. The future: what is being done to control the disease?

The oyster industry is actively employing and researching a number of strategies to manage and contain the disease to the two NSW bays where it is already present.

Management strategies and research projects currently include: breeding Pacific oysters for resistance; growing hatchery spat to a larger size before stocking; understanding how new husbandry methods can protect against mortalities; and emergency harvest in the face of possible outbreaks.

A group of Australian industry leaders [toured](#) oyster farms in France in November 2011 to better understand the impacts of the virus and how the Australian industry can proactively manage the disease.

## 12. For further information about POMS or to report oyster mortalities:

### NSW:

Web: [NSW Farmers Association - Oysters](#) Ph: 02 8251 1700

Web: [Pacific Oyster Mortality Syndrome – NSW](#)

Ph: Oyster Mortality Reporting Ph: 1800 043 536 or 02 4982 1232

### South Australia:

Web: [Oysters South Australia](#) Ph: 0407 883 333

Web: [Biosecurity South Australia](#) Ph: 1800 065 522

### Tasmania:

Web: [Oysters Tasmania](#) Ph: 0458 601 057

Web: [DPIPWE site relating to reporting of disease](#) Ph: 24 hour hotline: 1800 675 888

[DPIPWE re import conditions for molluscs](#)

## 13. Other Key Links:

Report: [Final Report OsHV-1  \$\mu\$ Var International Workshop, Cairns, 9-10 July 2011](#)

Slides: [Power point presentation: Pacific Oyster Mortality Syndrome](#)

Media: [Oyster industry learning international lessons to stop virus spread](#)