

# FAQs: Shellfish Health and Biosecurity

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## The importance of shellfish health

Good health is essential to the growth and survival of shellfish stocks, and good condition at market. Virginia waters are inhabited by a number of shellfish pathogens. Ensuring good health means managing these and preventing the introduction of new, exotic diseases.

## What do I need to do to be biosecure?

Think of *biosecurity* as a set of measures designed to reduce the risk of introduction, establishment and spread of pathogenic agents to, from, or within a farm. We maximize biosecurity in part through good farm management, avoiding overcrowding and keeping stress on animals low. An important additional means is the screening of imported seed to be sure it does not carry exotic pathogens or levels of established pathogens, like dermo, so high that it will worsen disease locally.

Proper farm management is the key to keeping your shellfish healthy and preventing the introduction of disease

## Shellfish disease threats in Virginia

Dermo disease is the primary local oyster disease threat, with MSX disease also causing a modest level of mortality in some years. QPX disease causes occasional mortality in clams, and SSO disease in Seaside oysters. All of these are caused by protozoan parasites that infect only shellfish—not humans.

## Shellfish disease threats outside Virginia – key players

ROD (formerly JOD, or juvenile oyster disease, caused by a bacterium) affects small hatchery seed in the Northeast. The protozoan parasite *Bonamia* has been found to infect eastern oysters on very rare occasions, in Massachusetts and North Carolina. Seed imports from outside Virginia must be free of detection of these diseases. Worldwide, concern is growing about other emerging infections caused by viruses and possibly environmental bacteria as well. We have not detected these diseases in shellfish populations here, but they remain the focus of our surveillance attention.

## Report unusual mortality

Industry is a key partner in the biosecurity management of Virginia shellfish aquaculture populations. What can you do? Report any unusual mortality at any time of year, anything above expected mortality for a given crop and location, as this could indicate an emerging problem. The VIMS Shellfish Pathology Laboratory routinely investigates such reports at no charge to industry.

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