

# SHELLFISH HEALTH & BIOSECURITY

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## BIOSECURITY BASICS

### HOW TO PREVENT INTRODUCING SHELLFISH DISEASE

Keeping your oysters healthy starts with preventing disease. That means:

- **Buy local seed** – only source from within the Chesapeake Bay to avoid bringing in outside pathogens.
- **Don't redeploy store-bought oysters** – oysters purchased for consuming should never go back in the water.
- **Cure shells before reuse** – let used shells dry in the sun for up to a year to kill off any leftover meat or fouling organisms. This helps stop potential disease introduction and improves water quality too.

### TIPS FOR A HEALTHY, BIOSECURE OYSTER GARDEN

Oysters can get stressed from sudden environmental changes or too much handling. While we can't control the weather, we can reduce stress and support good health with smart practices:

- Don't overcrowd. Give oysters space to grow—less stress means fewer chances for disease.
- Choose the right stock. Use well-performing or disease-tolerant seed suited to your area.
- Keep gear clean. Clean nets, bags, and cages regularly to maintain good water flow.
- Handle with care. Avoid moving oysters during extreme heat or cold.
- Track what's happening. Keep simple records of seed source, growth, survival, and unusual events like heat waves, heavy rain, or strange water conditions.
- Speak up. If you notice a lot of oysters dying, report it to VIMS early. It might not be disease, but it's worth checking.



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### ***SHELLFISH DISEASES - WHAT OYSTER GARDENERS NEED TO KNOW***

#### **SHELLFISH DISEASES IN VIRGINIA**

Some shellfish diseases are common in Virginia, like Dermo and MSX in oysters, and QPX in clams. These are caused by parasites that only affect shellfish—not people. You can manage them with good practices like avoiding overcrowding and using disease-tolerant seed.

#### **WHY BIOSECURITY MATTERS**

Virginia doesn't have some of the more serious diseases found elsewhere, like:

- ROD (affects small oysters in the Northeast)
- Bonamia (seen in MA and NC)
- Oyster herpes virus (OsHV-1) and other emerging threats

To keep these out, it's important not to move shellfish from outside the region without proper checks.

- See Something Unusual? Report It Early - If you notice a die-off, report it right away to the VIMS Shellfish Pathology Lab. They'll investigate for free, but they need live samples to figure out what's going on.

**Contact for advice and sample support:** Karen Hudson, VIMS MAP. 804-684-7742

**VIMS and VASG are partners in the [Regional Shellfish Seed Biosecurity Program: rssbp.org](https://rssbp.org)**



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### OYSTER GARDENERS: KEY PARTNERS IN DISEASE SURVEILLANCE

***Oyster gardeners play a critical role in protecting Virginia's shellfish populations. Because gardens are spread throughout tidal creeks along Virginia's coastline, they help create a natural network for spotting potential disease issues early. If you notice unusual mortality issues - report them.***

#### WHAT'S "UNUSUAL" MORTALITY?

It's normal to lose a few oysters during grow-out. Sometimes, gear gets fouled or predators like blue crabs cause losses—that's unfortunate, but expected.

Unusual mortality is when you see a lot of dead or dying oysters and can't figure out why. That's when it's time to report it—it could be a sign of disease or a new environmental stressor.

#### HOW YOU CAN HELP

- Report unusual deaths as soon as you notice them.
- Share details about how your oysters are growing and surviving.
- Stay alert—your observations help us detect new threats early and protect the broader aquaculture community.



#### IMPORTANT OBSERVATIONS

- When did the problem occur, begin, or was noticed?
- What is the estimate percent mortality? (count live & dead in a sample of 100)
- What is known about the age(s) and stock(s)?
- When did you last handle them?
- Are there other stocks or sizes nearby that are NOT experiencing mortality?
- Did you notice algal blooms or rainfall events or anything else coinciding with mortality or growth reduction?

**Contact for advice and sample support:** Karen Hudson, VIMS MAP. 804-684-7742

**Sample submissions:** VIMS Shellfish Pathology Lab: Ryan Carnegie, 804-684-7713