

HUMAN HEALTH - SAFE SHELLFISH HARVEST

CLASSIFICATION OF WATERS APPROVED FOR HARVEST

HOW SHELLFISH GROWING AREAS ARE CLASSIFIED

The **Virginia Department of Health's Division of Shellfish Safety (VDH DSS)** keeps a close watch on water quality in areas where oysters are grown. These waters—called “growing areas”—are tidal saltwater zones that can support shellfish. This is done under the guidance of a National program. There are just over 100 of these areas across Virginia, and DSS checks them every year. Based on their testing for potential sources of pollution and bacteria, areas are classified as either approved (open for harvest) or condemned (closed for harvest). If you're growing oysters, it's your responsibility to know the status of your area and follow any harvest rules that apply.



WHY CLEAN WATER MATTERS FOR SAFE SHELLFISH

Bivalve shellfish—like oysters—feed and breathe by pumping water through their gills, filtering out tiny food particles like algae. But if the water contains harmful stuff like bacteria, viruses, heavy metals, or other toxins, those get filtered too. These hazards don't hurt the shellfish, but they can build up in their tissues and make people sick if the shellfish are eaten. That's why shellfish growing waters are carefully tested and only the cleanest areas are approved for harvest—to help keep everyone safe.

GROWING AREA CLASSIFICATIONS

Areas are grouped in the following general categories:

- Approved: open for year-round harvest
- Conditionally approved: open for harvest unless a 'condition' has been met in which case the area is closed for a set period of time.
 - * *Predictable pollution (marinas, sewage treatment plants)*
 - * *Rainfall-based*
- Restricted: closed to the harvest of shellfish.
- Prohibited: areas with more significant pollution, such as heavy metals or toxins, that the relay process is not sufficient to purge. There is NO harvest of market shellfish, period.

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HUMAN HEALTH - SAFE SHELLFISH HARVEST

PUBLIC HEALTH THREATS AND MANAGEMENT

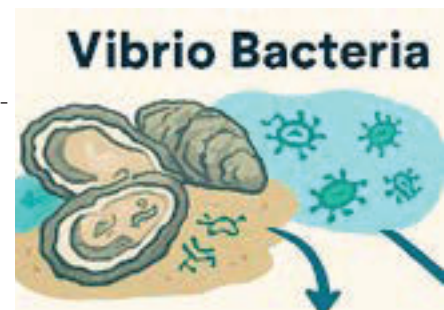
POLLUTION RISKS AND WHY THEY MATTER TO OYSTER GROWERS

Pollution from things like failing septic systems, animal waste, and stormwater runoff can put harmful germs—like fecal bacteria, Norovirus, and Hepatitis A—into the water. When this happens, shellfish can take in these germs as they filter water, and the hazards can build up in their tissues faster than they're released. That's why eating raw or undercooked shellfish from polluted water can make people seriously sick.

To reduce that risk, the **Virginia Department of Health's Division of Shellfish Safety (VDH DSS)** classifies growing areas based on water quality. Places with known risks—like near marinas or wastewater treatment plants—are often closed to harvesting, either seasonally or all year. The classification of your oyster garden depends on water monitoring data, so it's really important to stay updated on the status of your area and any changes nearby. VDH Shellfish Safety also works to track down land-based pollution sources that could impact shellfish-growing waters.

NATURALLY OCCURRING THREATS AND HOW THEY ARE MANAGED

Not all threats to seafood safety come from pollution—some are naturally occurring. For example, *Vibrio* bacteria are found naturally in coastal waters and can make people sick. This can happen either by eating undercooked seafood or by getting seawater with *Vibrio* into an open wound.



To reduce the risk of illness, there are strict rules in place for how seafood is harvested and handled, especially during warmer months when bacteria grow faster. These rules focus on limiting the time seafood is exposed to warm temperatures and keeping it cool after harvest. In Virginia, VDH DSS has a *Vibrio* Control Plan that commercial harvesters must follow.

If you're harvesting shellfish for personal use—like oyster gardening—you can also reduce your risk by following best practices for safe handling and consumption. (Check out "Best Practices for Handling and Harvesting" for tips.)

Another natural threat is Harmful Algal Blooms (HABs). While most algae in the water are harmless, some species can produce toxins under certain conditions. These toxins can affect people in different ways—through skin contact, breathing in the air near blooms, or eating contaminated seafood.

The good news is that Virginia hasn't had any cases of human illness from eating seafood affected by HABs, unlike some other parts of the country. Still, VDH DSS takes this seriously and has a Biotoxin Control Plan in place. This includes regular monitoring of shellfish growing areas to make sure everything stays safe.

HUMAN HEALTH - SAFE SHELLFISH HARVEST

CHECKING IF YOUR OYSTER GARDEN IS IN A SAFE HARVEST AREA

WHAT'S MY GROWING AREA CLASSIFICATION?

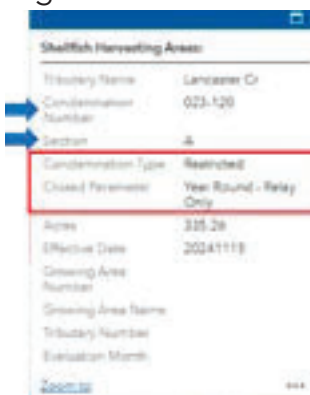
1. Go to the "[Shellfish Harvesting Area Map](#)" from the Virginia Department of Health, Shellfish Safety Homepage
2. Enter your address in the box located in the upper left corner of the map (denoted in yellow highlight on Figure 1)
3. Adjust the map as needed by zooming in or out using your mouse or by using the + and - buttons located in the upper left of the map.
4. Click the mouse on your garden location to access the classification information which will come up as a text box entitled 'Shellfish Harvesting Areas' (Figure 2.)
 - The arrows point to the info needed for your VMRC permit application.
 - The red box outlines the classification type.

Note: If you continue to Zoom in, you will see blue dots with a yellow outline. These represent VDH water sampling locations. Click on the circle for more information.

Figure 1.



Figure 2.



EXAMPLES OF THE CLASSIFICATION TYPES YOU MAY ENCOUNTER

