

Health in Our Changing Climate: Rising Sea Level

Why Now?

Higher sea levels can increase flooding and salt water contamination of low-lying areas, and weaken coastal infrastructure. Virginia is particularly at risk.

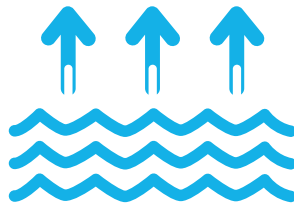
- Virginia has one of the highest rates of sea level rise. At the current rate, sea level in Norfolk will be 1-2 feet higher in 30 years.¹
- Norfolk will see between 85 to 125 days of high-tide flooding by 2050, compared to the 10-15 days in 2022.²
- In 2015, 164,000 Virginians were at risk of coastal flooding. By 2050, an additional 137,000 people are expected to be at risk due to sea level rise.³
- In low-lying rural areas and older homes with septic systems, increased groundwater can cause septic tank failure and contamination of waterways. This damages public health, water quality and local fisheries.⁴
- In 2019, salt water contamination was found in approximately 30% of the 2,300 tested private water wells in Virginia. In coastal localities, the prevalence was higher.⁵

Sea level rise is expected to increase septic system failures and salt water contamination of groundwater. These have serious effects on human health.



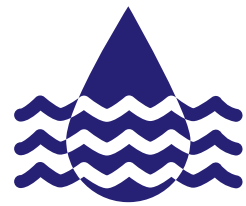
85-125

Number of high-tide
flooding days in Norfolk
by 2050.



137,000

Additional Virginians at
risk of coastal flooding
by 2050.



30%

Of private wells tested
with salt water
contamination.



Virginia Clinicians for Climate Action

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Disparities in Impact

Some Virginians are particularly vulnerable to health and environmental harms due to sea level rise.

- Norfolk has seen a 577% increase in flooding time since the 1970s.⁶
- Many rural areas and older homes rely on septic tanks. Increased flooding and extreme rainfall can result in contamination of private wells and waterways with bacteria, viruses, nitrogen, and phosphorous.⁷
- Analysis of the Tidewater region showed that an increasing number of septic failure “hot spots” are located in places that impact water supply quality, such as at the top of streams or creeks.⁸



577% Increase in flooding time
in Norfolk since the 1970s

What We Can Do

The Clean Energy and Community Flood Preparedness Act, passed in 2020, authorized Virginia to join the Regional Greenhouse Gas Initiative (RGGI) and created the Virginia Community Flood Preparedness Fund. RGGI is a market-based program that cuts heat-trapping pollution while generating revenue for flood protection. In its first year, Virginia received \$228 million, already used to strengthen community flood resilience. Virginia's participation is now under legal challenge after a 2023 withdrawal effort, and VCCA is advocating for reinstatement.

Join Virginia's clinicians in supporting responsible policies to address sea level rise and the health needs of Virginians.

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