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C O M M U N I T Y

# **NEWS**LETTER





# Welcome to the Spring Edition of the Barnstable County Community Health Newsletter!

It's already June and summer is fast approaching! What does summer on Cape Cod mean to you? Sun, sandy beaches, family barbecues, salty waves, picturesque kettle ponds, and a whole lot of traffic? We're just kidding about the last one. Wait...no we're not. In addition to all of the GOOD things that summer brings, it comes with its own set of public health challenges. We'll address some of those here, and also tell you about some important local public health intiatives.

In each edition, we continue to poll our readers to determine which local public health issues, programs, and services are most important to them, so that we can gear our content to community needs and preferences. We've received excellent feedback and want to extend our sincere thanks to everyone who has spoken up. We hear you and we plan to continue delivering consistent quality public health information to our readers Cape-wide! And if you haven't responded yet...please do!



Our Public Health Nursing Division continues to encourage everyone ages 6 months + to get their annual flu vaccine and be up to date on their COVID-19 vaccinations and boosters. Even as cold and flu season winds down and warmer weather approaches, vaccinations, in addition to good hand washing practices, social distancing measures, and staying home while sick are the best ways to prevent spreading harmful germs.

Need to catch up on your COVID-19 vaccines or booster shots? On Thursday, June 8th, our public health nurses will hold COVID-19 booster clinic. Come see us and get your COVID-19 immunization status up to date!

### **UPCOMING COVID-19 BIVALENT BOOSTER CLINIC**

### DETAILS



Thursday, June 8, 2023, 9:00 AM to 1:00 PM Harborview Conference Room Barnstable County Complex 3195 Main Street, Barnstable, MA 02630

Anyone ages 65+\*; Ages 12+ who are moderately or severely immunocompromised (no documentation required). Parental consent is required for anyone under 18.

\*Any previous COVID-19 bivalent booster must have been given more than 4 months prior to June 8th; 2 months prior for anyone considered moderately to severely immunocompromised.



## NEWSLETTER SPRING FDITION



# E-CIGARETTES HAVE REPLACED CIGARETTES AS THE NICOTINE DELIVERY DEVICE OF CHOICE AMONG YOUTH

Bob Collett, Tobacco Control Division Program Coordinator

Efforts to reduce cigarette smoking among our youth over the past several years have resulted in historically low smoking rates. Meanwhile, however, the tobacco industry has endeavored to addict yet another generation to nicotine with the introduction and proliferation of electronic cigarettes, otherwise known as "vaping devices". These products effectively exploit youths' affinity for technology while promoting the misleading perception that they are much safer and healthier to use than cigarettes or other combustible tobacco products.

A study released by the U.S. Food and Drug Administration (FDA) and the U.S. Centers for Disease Control and Prevention (CDC) in October of 2022 found that 2.55 million U.S. middle and high school students reported current (past 30-day) e-cigarette use in 2022, which includes 14.1% of high school students and 3.3% of middle school students. Nearly 85% of those youth used flavored e-cigarettes and more than half used disposable e-cigarettes. E-cigarettes produce an aerosol by heating a liquid that usually contains nicotine and flavorings. The liquid is commonly known as "e-juice" or "vape juice". The devices can also be manipulated to deliver marijuana and other drugs.

Nicotine can produce structural and chemical changes in the adolescent developing brain and may lead to future alcohol and other drug addiction, panic attacks, irritability, depression and learning problems. Because of the way that

nicotine affects the brain, people who start smoking as adolescents smoke more and have a harder time quitting than those who start as adults. Youth e-cigarette users are also much more likely to use cigarettes as adults.



Though the state of Massachusetts banned the sale of all flavored Nicotine Delivery Products and raised the legal age to purchase from 18 to 21 in 2020, youth continue to use these products at an alarming rate. Curiously, illegal sales to minors have returned to levels unseen in several years despite increased efforts to educate retailers and impose fines and sales permit suspensions for violators. Illegal sales are an issue as well, whereby young people, barely of legal age, are purchasing e-cigarette products such as Juul and selling them to minors for profit. The attraction for young people is almost irresistible, and companies such as Juul spend billions marketing the products to kids, despite their assertions to the contrary.

# **NEWS**LETTER

DEPARTMENT OF HEALTH AND ENVIRONMENT

**BARNSTABLE COUNTY** 



#### **E-CIGARETTES**

(Continued)

Manipulating teens to get them to buy harmful products is nothing new. Old-school cigarette companies, known as Big Tobacco, did it for years. In the 1930s, '40s, and '50s, cigarette ads featured images of smoking students wearing graduation caps or cheerleading uniforms. Some ads were designed like comic strips, and one brand even had a cartoon mascot until 1997. Today, e-cigarette companies like Juul (which is owned in part by Altria, a Big Tobacco corporation that makes several brands of cigarettes) are borrowing cigarette companies' old tactics in their ads, packaging, and product design.

In 2022, the FDA announced proposed federal rules to prohibit the use of menthol in cigarettes and other flavorings used in cigars. Menthol is a flavor additive with a minty taste and aroma that reduces the irritation and harshness of smoking, thereby increasing the ease and appeal of smoking to youth and young adults. The public is urged to send a letter to the Biden Administration via the American Lung Association requesting that these rules be finalized. Visit the following link for more information: Ask President Biden to Remove Menthol Cigarettes and Flavored Cigars from the Market (lung.org).

While state and federal bans on these products are essential, it's more important than ever that adults and youth are educated on the dangers of ecigarettes. Parents, health care providers, teachers, and others can all make a difference simply by talking with young people about the negative impacts of nicotine.

For more information please visit our website at <u>Tobacco Control Program - Barnstable County</u> (capecod.gov).

#### **Additional Resources**



Know the Risks: E-Cigarettes and Young People



FDA Tobacco Education
Resource Library



**Tobacco Prevention Materials** 





# HEADS UP PARENTS! HOW TO DECREASE THE RISK OF DROWNING DURING THE SUMMER SEASON

Theresa Covell, Assistant Public Health Nurse

This past February, my family and I had the good fortune of visiting Nana and Papa and their neighborhood pool in Florida. My best friend from childhood who was once a competitive collegiate swimmer and remains an avid swimmer as an adult, was visiting with her son. While the kids swam and splashed, we sat at the edge of the pool, legs dangling in the water, catching up. We began chatting with another family as their kids entered the pool. A few moments later an older adult lounging poolside sprung up, bent down at the edge of the pool and grabbed a young boy who was submerged. He had entered the pool slowly, one step at a time. When he took the final step down into the pool, the water was over his head. He stood there, unable to move, with his mouth and nose underwater. There was no sound, no splashing, no screams for help. Five parents were there, attentively watching our kids, but not one of us noticed the young boy's head was under water. He was ok, but I felt disbelief, and then shame... how could this happen a few feet away without us noticing?

I had incorrectly imagined a commotion: hands waving, calls for help, and splashing. Learning about the reality of what drowning looks like stuck with me, yet I still had much to learn. According to the Centers for Disease Control (CDC), 4,000 people die from drowning in the U.S every year, which equates to an average of 11 people who drown daily. It's the leading cause of death among children between one and four years of age.

For children ages five to 14 years, drowning is the second leading cause of unintentional injury and death after motor vehicle crashes.

Drowning is a major public health problem and it's completely preventable.

#### Who is at risk of drowning?

Anyone can die from drowning anytime there is access to water, even if they know how to swim. Certain populations are at higher risk of dying by drowning: infants, toddlers, teens (especially male teens), people with certain medical conditions like epilepsy and autism spectrum disorder, and people from socioeconomic groups with limited access to basic swimming and water safety training.

#### Socioeconomic Factors, Race, and Disabilities Impact Drowning Rates

Deaths among persons with autism spectrum disorder were nearly 40x as likely to be caused by drowning as deaths in the general population. Children with special health care needs should have tailored anticipatory guidance related to drowning risks. For any age group and ability, consider the effects of medications and how they may impair a person's ability to safely be in water.

Significant racial and socioeconomic disparities exist in drowning rates among children. For people younger than age 30, drowning rates among Black

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SPRING EDITION



#### **DROWNING PREVENTION**

(Continued)

people were 1.5x higher than white people. Socioeconomic barriers to achieving basic water competency include cost, limited access to quality programs, and transportation. Compounding the challenge is decreased municipal funding for swimming pools, swimming programs, and lifeguards.

Increased access to programs that develop watercompetency skills for all children, especially those from low-income and diverse families and those with developmental disabilities, will help improve equity.



#### **How to Prevent Drowning**

- Teach children to always ask permission to go near water.
- Know that swimming lessons provide one layer of protection from drowning; they do not "drown proof" a child.





- Closely, constantly, and attentively supervise children when they are in and around water. Inadequate supervision is often cited as a contributing factor for childhood drowning, especially for younger children. Cell phone use, reading, conversing, and consuming alcohol or drugs impairs supervision.
- Clearly communicate which adult is responsible for each child. In a large group setting, even in the presence of a lifeguard, each young child should have a designated adult within arm's length who is focused on supervising that child.
- Parents, caregivers, pool owners, and even older children should learn CPR and keep a telephone and rescue equipment approved by the U.S.
   Coast Guard (e.g., life buoys, life jackets, and a reach tool such as a shepherd's crook) waterside.
- When visiting a new home, check the premises for potential water hazards and formulate a plan for supervision of children. Ensure barriers are in place to prevent unintended access to water during non-swim times. A mom who lost a young son to drowning, shares this message: "We did it. We did everything we knew to do right. How did I not know how often drowning occurs during a non-swim time?" The Consumer Product Safety Commission (CPSC) found that 69% of children younger than 5 years of age were not expected to be at or in the pool at the time of a drowning incident. Barriers are critical in preventing access to water during non-swim times.



#### **DROWNING PREVENTION**

(Continued)

## Adolescents (15 to 19 years) have the 2nd Highest Drowning Rate

Adolescent deaths from drowning account for half of childhood drownings in natural water. Why? Because teens can easily overestimate water skills, underestimate dangerous situations, and engage in high-risk and impulsive behaviors such as jumping or diving without being aware of underwater hazards. Parents and children should be aware of water depth and physical hazards before being permitted to jump or dive. Further, parents should teach their teens to know the importance of not swimming alone, to always go in the water feet first, to wear a life vest when boating, to learn CPR, and to avoid alcohol and drugs when swimming or boating.

## Do you know the Red Cross chain of drowning survival?

A person who is drowning has the greatest change of survival if these steps are followed:

- 1. Recognize the signs of someone in trouble and shout for help.
- 2. Rescue and remove the person from the water (without putting yourself in danger).
- 3. Ask someone to call emergency medical services (EMS).
- 4. If alone, give 2 minutes of care, then call EMS.
- 5. Begin rescue breathing and CPR.
- 6. Use an AED if available and transfer care to advanced life support.

## **Chain of Drowning Survival**





## **Drowning Prevention Resources**



Drowning Prevention
Campaign Toolkit | American
Academy of Pediatrics

Drowning Prevention for
Curious Toddlers |
Healthychildren.org





Water Safety for Teens |
Healthy Children.org



Drowning Prevention and Water Safety | American Academy of Pediatrics



Water Safety for Teens Infographic



CDC's Drowning Prevention
Page



<u>Learn the Five Layers of</u>
<u>Prevention | National</u> **Drowning Prevention Alliance** 



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# CYANOBACTERIA ON CAPE COD: WHAT IT IS, HOW IT AFFECTS US, AND WHAT'S BEING DONE TO PROTECT PUBLIC HEALTH

Department Staff Contributer

Lately, there's been quite a bit of discussion about cyanobacteria (also called blue-green algae or Harmful Algae Blooms) in Cape Cod's ponds, leading some to wonder whether it's safe for people and/or their pets to swim. The term "pollution" has popped up on social media forums as well as in local news media, generating the impression that the region's water bodies are tainted and therefore unsafe for humans and animals. This perception is not entirely unfounded, nor is it 100% accurate. It's... complicated.

Local public health officials recognize that cyanobacteria is an area of concern for residents and visitors alike, and have been meeting regularly to determine a proactive multi-agency approach for dealing with this complex issue, which requires attention from both a public health and environmental standpoint.

Cyanobacteria is not pollution, per se. It's a natural phenomenon that can occur in healthy ecosystems. Typically however, its potential for overgrowth is kept in check by a balance of several different factors, one of which is nutrient availability. All animals and plants require nutrients to grow and thrive, but if an external force makes nutrients either scarce or overabundant—the balance is disrupted and things can start to go wrong. Here on Cape Cod, human activities—from fertilization to faulty septic systems—have introduced an overabundance of nutrients into the environment, which leads to an ecologically unhealthy

#### Signs of a cyanobacterial bloom



Foam, scum, mats, or paint-like streaks on the water's surface.



**Different colors** like green, blue, red, or brown.



As the bloom dies off, it may smell like rotting plants.



Cyanobacteria **bloom more often in summer and fall**, but can bloom anytime.

You cannot tell if a cyanobacterial bloom is toxic or not just by looking at it.

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SPRING EDITION



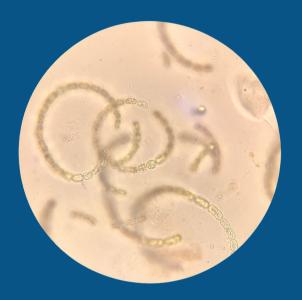
#### **CYANOBACTERIA**

(Continued)

condition called eutrophication (the process by which a water body becomes enriched in dissolved nutrients such as phosphates and nitrogen). The greater the nutrient availability, the more fuel for cyanobacteria (and other undesirable plant life) to grow and thrive. Global warming also plays a key role with warmer pond temperatures favoring cyanobacteria.

When discussing cyanobacteria, we often hear the term used interchangeably with harmful algae blooms (HABs) and toxic algae. There is, however, an important distinction to make: not all cyanobacteria is toxin producing. So while an overgrowth of cyanobacteria may have some aesthetic impact on a particular water body or even environmental implications, it may not be harmful to people and their pets. That said, a visual assessment alone is not enough to make a determination between toxic and non-toxic, so further analysis is required. And if you don't know either way, it's always best to conclude the following: WHEN IN DOUBT, STAY OUT.

From the 2022 MA DPH Guidance for Cyanobacteria in Recreational Waters: "Cyanobacteria and their associated cyanotoxins pose a risk to human and animal health. Cyanotoxins are of primary concern due to the potential for causing serious health effects. Because there are over 100 types of cyanotoxins, testing for them all is not possible or practical. Therefore, the health protective approach is to assume that cyanotoxins are present in any algae bloom."



There are two disciplines interested in developing a strategy for dealing with cyanobacteria blooms in our region. Public health officials and environmental groups. There is an economical factor as well; algae-filled water bodies are not ideal for homeowners. home buyers and visitors who seek enjoyment of the region's natural resources. Because Barnstable County is a public health entity that supports the local boards of health in every one of Cape Cod's 15 towns, our focus is the primary directive of public health: to promote and protect the health of our communities. At the same time, we are working alongside our colleagues in the environmental field to support their mission to protect our sensitive ecosystem, the health of which is closely tied to the wellbeing of our local economy.

It's important to understand that remediation the act of reducing or solving environmental damage—differs distinctly from prevention—the act of stopping something from happening. Public health

## **NEWS**LETTER

SPRING FDITION



#### **CYANOBACTERIA**

(Continued)

officials are interested in preventing injury or harm from known health hazards, while environmental officials are interested in remediating or reducing impact to our sensitive ecosystem. While the two approaches can be different, both have equal stake in bringing awareness to the public.

Barnstable County has partnered with the Association to Preserve Cape Cod (APCC), a local non-profit environmental organization, to proactively monitor Cape Cod's ponds for cyanobacteria and, more specifically, the toxins they sometimes produce. APCC will collect pond water samples and use a predictive methodology called CyanoCasting. While this method provides useful information regarding cyanobacteria presence and abundance, it does not provide data regarding the existence or quantity of harmful toxins.

If APCC's team, through the use of the above-described CyanoCasting method, determines that additional confirmatory toxin testing is warranted, the Barnstable County Water Quality Lab will then perform toxin analysis via Environmental Protection Agency (EPA).

Approved Method 546 for Surface Water Sampling. If toxins are found to be present in an amount considered to be harmful to humans and pets, an advisory will be issued by the local board of health to make the public aware that swimming could pose a risk of illness. For more specifics regarding the particulars of the monitoring program, please visit APCC's cyanobacteria monitoring web page.

It is important to note that currently, no regulatory framework exists for the collection and analysis of cyanobacteria. The Massachusetts Department of Public Health provides guidelines and recommendations, both of which APCC and the Barnstable County Water Quality lab adhere to, but there is no regulation or law that mandates these monitoring efforts. This is unlike Barnstable County's existing Bathing Beach Monitoring Program, which was established in 2002 to help Cape Cod's communities comply with Massachusetts Bathing Beach Regulations 105 CMR 445.00. that require the weekly monitoring of fecal bacteria levels in marine and fresh recreational waters. Any cyanobacteria monitoring strategies including site selection, sampling frequency, etc., that are conducted in accordance with the collaborative agreement between APCC and Barnstable County, are solely at the discretion of the two organizations and contributing local boards of health

#### **Look Out for our Signs!**

Our beach monitoring signs will be posted at over 350 swimming beaches across Cape Cod's 15 towns. We monitor public (town beaches) and semi-public (association) beaches for **fecal bacteria**. We do not monitor private beaches. The sign includes information about the beach operator and a phone number to contact if you have questions or concerns. If our testing shows levels of fecal bacteria levels higher than the acceptable limit, the middle portion of the sign that reads "fecal bacteria levels found to be within acceptable limits" will be covered with



a decal that reads "NO SWIMMING! Swimming may cause illness". The decal will be removed when retesting shows that are bacteria levels are within acceptable levels. While the signs do not directly address cyanobacteria, a QR code at the bottom of the sign takes the user to our website for further information, including links to APCC's cyanobacteria monitoring page.

Worried about a potential cyanobacteria bloom? Send us an email at bch.info@capecod.gov!



### READ BEFORE YOU SWIM



## **Important Water Quality** Information

#### BEACH NAME

Dates of Operation

Beach Operator's Name Beach Operator's Phone Number Town Board of Health

This beach is only monitored for fecal bacteria according to the dates of operation listed on this sign per MA Bathing Beach Regulations 105 CMR 445.000. The beach water is not monitored outside of these dates of operation.

## Fecal bacteria levels were found to be within acceptable limits.

If fecal bacteria levels are found to be unsafe for swimming, the information will be clearly indicated with additional signage.

For more information, visit www.capecod.gov/beachtestingresults

## When in Doubt Stay Out!

If the water looks off color or has a visible green, yellow, or brown scum, DO NOT SWIM or allow your pets to swim, regardless of safe fecal bacteria levels.

Scan the QR Code to learn more!







Escanea el código QR para ver este información en Español Escaneie o QR Code para ver este Informação em Português



# AQUIFUND, FORMERLY THE CAPE COD SEPTIC MANAGEMENT LOAN PROGRAM, OFFERS NEW OPTIONS FOR HOMEOWNERS

Department Staff Contributer



After 16 years and over \$56 million in low-interest loans distributed for approximately 4,700 septic system repairs and replacements on Cape Cod, the Community Septic Management Loan Program (CSMLP) expanded and rebranded its program to include loans for the installation of innovative/alternative technologies, as well as sewer connections. This expansion is in response to the growing problem of nitrogen pollution in the bays, estuaries, and ponds across Cape Cod that will require residents to upgrade or replace their current septic systems or connect to town sewers. The CSMLP program is now called AquiFund, in reference to Cape Cod's sole source aquifer.

Failed or poorly performing septic systems can leak harmful nutrients such as nitrogen and phosphorus into the groundwater and

neighboring surface water bodies, which may lead to toxic algae blooms that are harmful to the health of humans, their pets, wildlife, and marine life in the region. On Cape Cod, 126,000 properties use onsite septic systems with only a small number — 2,382 properties — identified as having new or alternative septic systems.

Given the degraded water quality on Cape Cod, the Massachusetts Department of Environmental Protection is proposing stricter regulations to Title 5 septic regulations and Cape Cod municipalities are building sewers to protect the region's water from further nitrogen pollution.

To help with the financial burden that many residents will face when replacing or upgrading their septic systems or connecting to a municipal sewer, AquiFund provides accessible low-interest loans for all residential wastewater management measures, especially for those with greater financial need.

"AquiFund is an important community loan program as it provides equitable access to financial assistance for residential wastewater management so Cape Codders can afford to make decisions that benefit the environment and overall health of our communities," said Brian Baumgaertel, Senior Program Specialist for the Barnstable County Department of Health and Environment. "Our County has a strong commitment to protecting water quality and AquiFund is one of many programs the County

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SPRING EDITION

#### **AQUIFUND**

(Continued)

offers to actively protect the health of our waterways throughout the region."

Barnstable County residents can apply for lowinterest betterment loans for repairing or replacing failed septic systems, upgrading to alternative septic system technologies, as well as installing sewer connections.

Interest rates for new applicants will be calculated based on financial need along with additional qualifying criteria:

 0% interest rate betterment loans are available to year-round homeowners with a household income less than \$100,500 living in a single-family, owner-occupied, primary residence located in a nitrogen-sensitive watershed.

- 2% interest rate betterment loans are available to year-round homeowners with a household income less than \$150,500 living in a single-family, owner-occupied, primary residence located in a nitrogen-sensitive watershed.
- All other new projects are eligible for loans at 4%.

AquiFund program updates include a new loan application and management portal on the Department of Health and Environment's website. Go to

<u>http://www.capecod.gov/aquifund</u> for more information.

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#### INTERESTED IN WATER QUALITY ON CAPE COD?

#### **Topics include:**

- Cape Cod's Sole Source Aquifer
- Wastewater Science
- The Proposed Machine Gun Range at Joint Base Cape Cod
- Info. about PFAS Contamination

...and more!





#### June is Alzheimer's and Brain Awareness Month!

Info. Courtesy of the Alzheimer's Association - Click the image for more info.!

## 10 WAYS TO LOVE YOUR BRAIN



**START NOW.** It's never too late or too early to incorporate healthy habits.

Growing evidence indicates that people can reduce their risk of cognitive decline by adopting key healthy habits!

- **Break a Sweat**
- Engage in regular cardiovascular exercise that elevates your heart rate and increases blood flow to the brain and body.
- Hit the Books
- Formal education in any stage of life will help reduce your risk of cognitive decline and dementia. For example, take a class at a local college, community center or online.
- **Butt Out**
- Evidence shows that smoking increases risk of cognitive decline. Quitting smoking can reduce that risk.
- Follow Your Heart
- **>**
- Evidence shows that risk factors for cardiovascular disease and stroke obesity, high blood pressure and diabetes negatively impact your cognitive health.
- Head's up!
- **>**
- Brain injury can raise your risk of cognitive decline and dementia. Wear a seat belt, use a helmet when playing contact sports or riding a bike, and take steps to prevent falls.
- Fuel up Right!
- Eat a healthy and balanced diet that is lower in fat and higher in vegetables and fruit to help reduce the risk of cognitive decline.
- Catch Some
- Not getting enough sleep due to conditions like insomnia or sleep apnea may result in problems with memory and thinking.
- Take Care of Your Mental Health
- **>**
- Some studies link a history of depression with increased risk of cognitive decline, so seek medical treatment if you have symptoms of depression, anxiety or other mental health concerns. Also, try to manage stress.
- **Buddy up!**
- Staying socially engaged may support brain health.
- Stump Yourself
- Challenge and activate your mind. Build a piece of furniture.

  Complete a jigsaw puzzle. Do something artistic. Play games, such as bridge, that make you think strategically.

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### WHERE TO FIND US



## NEWSLETTER WINTER EDITION



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## We want to hear from you!

Click the button below to answer a few questions to help us better understand what our readers would like to see in future editions. We value your input!

