

TOWN OF HARWICH



BOARD OF HEALTH

732 Main Street Harwich, MA 02645
508-430-7509 – Fax 508-430-7531
E-mail: health@town.harwich.ma.us



TOWN OF HARWICH BOARD OF HEALTH
TUESDAY, APRIL 20, 2021-6:30 P.M.
HARWICH TOWN HALL – REMOTE MEETING

As required by law, the Town may audio or video record this meeting. Any person intending to either audio or video record this open session is required to inform the Chair

Pursuant to Governor Baker’s March 12, 2020 Order Suspending Certain Provisions of the Open Meeting Law, G.L. c. 30A, §20, and the Governor’s March 15, 2020 Order imposing strict limitations on the number of people that may gather in one place, this meeting of the Harwich Board of Health is being conducted via remote participation. No in-person attendance of members of the public will be permitted, but every effort will be made to ensure that the public can adequately access the proceedings as provided for in the Order.

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- I **CALL TO ORDER**
- II **MINUTES OF PREVIOUS MEETING (Regular Meeting Minutes)** March 16, 2021
Minutes shall be reviewed; proposed changes shall be possible; and a vote to approve with any noted changes shall be taken.
- III 6:30 PM - **BOARD OF HEALTH WORK SESSION**
 - A. **COVID-19 Update-** *Vote to accept/deny/take this under consideration*
 - B. **Staffing Update-** *Vote to accept/deny/take this under consideration*
- IV **OLD/UNFINISHED BUSINESS** (No earlier than 7:00 p.m.)- *Vote to accept/deny/take this under consideration*
- V **NEW BUSINESS**
 - A. **Hearing-Rose, 44 Pine Grove Road-** to reconsider Order of Conditions granted on October 29, 1996- There is to be no increase of square footage beyond that shown on a plan dated October 14, 1996. The applicant is requesting removal of square footage limitation to allow for finished attic bedroom and deconstruction of dining room wall to eliminate one bedroom downstairs to maintain 3 bedroom compliance- *Vote to accept/deny/take this under consideration*

B. 351 Pleasant Lake Avenue/Cape Cod Regional Technical High School-On behalf of Cape Cod Regional Technical High School, Garcia, Galuska & DeSousa is requesting Board of Health review and support of an application to the State Plumbing Board for a variance from the State Plumbing Code: Relief to building toilet facilities with 50% of the required water closet fixtures. They request that the proposed athletic field bathrooms be allowed to be constructed with a total of 4 female water closets, 2 male water closets, 2 male urinals and 2 lavatories per sex. - *Vote to accept/deny/take this under consideration*

VI REPORT OF THE HEALTH DIRECTOR- MARCH 2021- *Vote to accept/deny/take this under consideration*

VII CORRESPONDENCE- *Vote to accept/deny/take this under consideration*

A. Massachusetts Department of Environmental Protection Drinking Water Program-2020 Consumer Confidence Report Certification

VIII PERMITS- *Vote to accept/deny/take this under consideration*

ESTABLISHMENT	ADDRESS	TYPE	TYPE
FOOD SERVICE			
A & W Restaurant	297 Route 28	61-150 seats	Frozen Dessert
Belmont Condo Trust *	1 Belmont Road	61-150 seats	
Hot Stove at Cranberry Valley *	183 Oak Street	31-60 seats	
Sundae School *	606 Route 28	31-60 seats	Frozen Dessert
Sweet Daisies *		Event Permit	
Sweet Izzy *	296 Route 28	Frozen Dessert	
The Tern Inn (NEW OWNERS 2021)	91 Chase Street	1-30 seats	
Weatherdeck Restaurant *	168 Route 28	61-150 seats	
Wequassett-Main Kitchen *	2173 Route 28	>150 seats	
Wequassett-Pavillion *	2173 Route 28	61-150 seats	
Wequassett-Outer Bar & Grill *	2173 Route 28	61-150 seats	
Wequassett-Tennis Grille *	2173 Route 28	1-30 seats	
Wychmere Harbor Functions- Café *	23 Snow Inn Road	61-150 seats	
Wychmere Harbor Functions- Clubhouse *	23 Snow Inn Road	>150 seats	
MOTEL			
A Beach Breeze Inn *	169 Route 28		
Cape Cod Wishing Well *	212 Route 28		
Commodore Inn *	30 Earle Road		
Inn on the Beach *	16 Bank Street		
Old Harwich Lodgings *	40-44 Route 28		
TITLE 5 INSPECTOR			
Adam Riker *			
Dave Perry *			
Winston Steadman *			
BATHING BEACH			
Allen Harbor Beach Assoc. *	0 Dunes Road	Nantucket Sound	
Belmont Condo Trust *	1 Belmont Road	Nantucket Sound	
Inn on the Beach *	16 Bank Street	Nantucket Sound	
Old Mill Point Association *	along Strandway	Nantucket Sound	
Old Mill Point Association *	end of Seaway	Nantucket Sound	

Sandy Shore Association *	Sandy Shore Way	Aunt Edies Pond	
Stone Horse Yacht Club *	2 Harbor Road	Nantucket Sound	
Town of Harwich Recreation Dept. *	Atlantic Ave Beach	Nantucket Sound	
Town of Harwich Recreation Dept. *	Bank Street Beach	Nantucket Sound	
Town of Harwich Recreation Dept. *	Brooks Road Beach	Nantucket Sound	
Town of Harwich Recreation Dept. *	end of Bucks Pond Road	Bucks Pond	
Town of Harwich Recreation Dept. *	Earle Road Beach	Nantucket Sound	
Town of Harwich Recreation Dept. *	Grey Neck Beach	Nantucket Sound	
Town of Harwich Recreation Dept. *	Hinkleys Pond at Route 124	Hinkleys Pond	
Town of Harwich Recreation Dept. *	Long Pond at Cahoon Street-Long Pond 1	Long Pond	
Town of Harwich Recreation Dept. *	Long Pond at Long Pond Drive-Long Pond 2	Long Pond	
Town of Harwich Recreation Dept. *	Long Pond at Route 124-Long Pond 3	Long Pond	
Town of Harwich Recreation Dept. *	Merkel Beach	Nantucket Sound	
Town of Harwich Recreation Dept. *	Neel Road Beach	Nantucket Sound	
Town of Harwich Recreation Dept. *	Pleasant Bay at Route 28	Pleasant Bay	
Town of Harwich Recreation Dept. *	Pleasant Road Beach	Nantucket Sound	
Town of Harwich Recreation Dept. *	Red River Beach-East	Nantucket Sound	
Town of Harwich Recreation Dept. *	Red River Beach-Middle	Nantucket Sound	
Town of Harwich Recreation Dept. *	Red River Beach-West	Nantucket Sound	
Town of Harwich Recreation Dept. *	Robbins Pond at Cahoon Landing	Robbins Pond	
Town of Harwich Recreation Dept. *	Sand Pond at Great Western Road	Sand Pond	
Town of Harwich Recreation Dept. *	Sea Breeze Avenue Beach	Nantucket Sound	
Town of Harwich Recreation Dept. *	Sea Street Beach	Nantucket Sound	
Town of Harwich Recreation Dept. *	Seymore Pond at Route 124	Seymoure Pond	
Town of Harwich Recreation Dept. *	Skinequit Pond at Ocean Street	Skinequit Pond	
Town of Harwich Recreation Dept. *	Wah Wah Taysee Road Beach	Nantucket Sound	
Town of Harwich Recreation Dept. *	Wyndemere Bluffs Road Beach	Nantucket Sound	
Town of Harwich Recreation Dept. *	Zylpha Road Beach	Nantucket Sound	
Wychmere Beach Club *	23 Snow Inn Road	Nantucket Sound	
POOL			
Belmont Condo Trust *	1 Belmont Road		
Commodre Inn *	30 Earle Road		
Wequassett Resort *	2173 Route 28	Spa Room 20	
Wequassett Resort *	2173 Route 28	Spa Room 12	
Wequassett Resort *	2173 Route 28	Spa Room 18	
Wequassett Resort *	2173 Route 28	Spa Room 10	
Wequassett Resort *	2173 Route 28	Main Pool	
Wequassett Resort *	2173 Route 28	Main Pool Spa	
Wequassett Resort *	2173 Route 28	Lap Pool	
Wequassett Resort *	2173 Route 28	Spa Room 46	
Wequassett Resort *	2173 Route 28	Spa Room 44	
Wequassett Resort *	2173 Route 28	Lap Pool Spa	
SEPTIC INSTALLER			
Aaron Gingras *			

Macura Excavating *			
FUNERAL DIRECTOR			
Chapman Funerals & Cremations *	678 Main Street		
*2021 Renewal			

IX **OTHER-** *Vote to accept/deny/take this under consideration*

X **ADJOURN-** *Vote to accept/deny/take under consideration*

Authorized posting officer:

Posted by:

Jennifer Clarke

Anita D'Amico

Signature

Date

Town Clerk

Date

Per the Attorney General's Office: The committee may hold an open session for topics not reasonably anticipated by the Chair 48 hours in advance of the meeting following "New Business." If you are deaf or hard of hearing or a person with a disability who requires an accommodation, contact the Selectmen's Office at 508-430-7513

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BOARD OF HEALTH

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**TOWN OF HARWICH BOARD OF HEALTH
TUESDAY, MARCH 16, 2021-6:30 P.M.
HARWICH TOWN HALL – REMOTE MEETING**

BOARD OF HEALTH MEMBERS PRESENT: Vice Chairwoman Sharon Pflieger, Member Ronald Dowgiallo, Member Matthew Antoine & Member Kevin DuPont, R.N.

BOARD OF HEALTH MEMBERS ABSENT: Chairwoman Pamela Howell, R.N.

STAFF MEMBERS PRESENT: Assistant Town Administrator Meggan Eldredge, Health Director Kathleen O’Neill & Executive Assistant Jennifer Clarke

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I CALL TO ORDER

Ms. Pflieger called the meeting to order at 6:30 p.m.

II MINUTES OF PREVIOUS MEETING (Regular Meeting Minutes) – February 16, 2021

Mr. Dowgiallo moved to approve the minutes of the February 16, 2021 Board of Health meeting, 2nd by Mr. DuPont. The vote was 4-0-0 with Ms. Pflieger, Mr. Antoine, Mr. Dowgiallo & Mr. DuPont all voting aye by roll call.



III 6:30 PM - BOARD OF HEALTH WORK SESSION

A. Staffing Update-Introduction of new Health Director, pending Board of Selectmen confirmation-Dr. Kathleen O'Neill

Assistant Town Administrator Eldredge stated that she has been working as both the Assistant Town Administrator and Interim Health Director for the last 4 weeks. Last night, the Board of Selectmen confirmed the appointment of Dr. Kathleen O'Neill as the new Health Director for the Town of Harwich. Health Director O'Neill was previously the Town's Senior Health Agent. Health Director O'Neill has taken the reigns on COVID-19 vaccinations for our homebound residents. She has also developed a great working relationship with engineers and builders. Assistant Town Administrator Eldredge and Health Director O'Neill will work together to make sure that everyone is brought up to speed on open projects and day to day administrative items that are done by the Health Director.

Health Director O'Neill was present and commented on the amazing work that Ms. Eldredge had done in her time as Director. She looks forward to working with everyone in the future and is excited to move forward.

Selectman Larry Ballantine was present and stated that he could not be more pleased with the staffing changes that were made, noting that both promotions are well deserved.

Ms. Pflieger congratulated Ms. Eldredge on her promotion and welcomed Dr. O'Neill as the Health Director.

B. COVID-19 Update

Assistant Town Administrator Eldredge reviewed the COVID-19 updates that were provided in the packets. Harwich has seen a dramatic decrease in the number of cases that we have been following at one time. We are currently following 5 active cases. If the State data remains the same, Governor Baker has announced the possibility of moving into Phase 4 of the State's re-opening plan.

Although COVID-19 vaccine distribution seems to be moving slowly, vaccines are still being dispensed. There is a new COVID-19 vaccination site which has opened at Cape Cod Community College which will be able to accommodate more opportunities for vaccine distribution. There is a wait list being generated for the College site.

Ms. Pflieger asked who would be eligible to be on the wait list for the College Site. Assistant Town Administrator Eldredge responded that you can only be on their waitlist if you are in one of the current eligible groups to be vaccinated. Health Director Eldredge added that residents can be put on a pre-registration waiting list for one the Mass Vaccination Sites. We have received confirmation that COVID-19 vaccine has been received by Outer Cape Health Services and we will begin to vaccinate our homebound residents next week. We will then move into vaccinating our senior housing population.

C. Discussion and possible vote on request from the Health Agents Coalition to sign the petition to reclassify health officials into Group 2 of the public retirement system, as provide din the packet

Provided in the packet is information from the Massachusetts Health Officers Association that is asking local Boards of Health to sign a letter that shows support for an act relative to group 2 retirement for Public Health Officials. Health Officials are currently lumped in with other clerical type staff in public

administration. Group 2 includes Police, Fire and other Public Safety Officials. Designation to Group 2 means that the age requirement for retirement is younger. With the pandemic, Health Officials have been pushed into the realm of public safety.

Mr. Antoine and Ms. Pflieger agreed that the move into Group 2 is warranted and is long overdue.

Mr. Antoine moved to sign the petition letters to reclassify health officials into Group 2 of the public retirement system, as presented in the packet, 2nd by Mr. DuPont. The vote was 4-0-0 with Ms. Pflieger, Mr. Dowgiallo, Mr. Antoine & Mr. DuPont all voting aye by roll call.

IV NO EARLIER THAN 7:00 PM -OLD/UNFINISHED BUSINESS

No old/unfinished business was discussed.

V NEW BUSINESS

A. Show Cause Hearing-Sweeney, 38 Periwinkle Way- Show cause hearing for failure to comply with an order issued to upgrade a failed septic system

Ms. Pflieger opened the hearing. Jim Sweeney was present remotely. On November 24, 2019, the Health Department received a Title 5 Inspection report for 38 Periwinkle Way. A notice of violation was issued to the owners stating that cesspools are failing criteria in the Town of Harwich. The property owner was ordered to engage a professional engineer or registered sanitarian to design a new septic system in conformance with Title 5 and Harwich Board of Health Regulations. Mr. Sweeney contacted the Health Department and asked that a copy of the notice of violation be emailed to him, which was done on December 16, 2019.

As of February 23, 2021, the Health Department had received no further communication from the property owner or received any permits to upgrade the septic system. The Health Department sent a certified letter to the property owner requiring them to appear before the Board of Health at tonight's meeting.

On March 2, 2021, Mr. Sweeney contacted the Health Department and asked for information on the Barnstable County Septic Loan Program.

Mr. Sweeney stated that when his mom received the notice of violation, she did not have the financial means to replace the system. Since inquiring about the Barnstable County Septic Loan Program, they have applied and were approved last week. About an hour before tonight's meeting, Mr. Sweeney emailed the Health Department a copy of his signed betterment agreement with Barnstable County as well as a signed contract with Engineering Works, Inc. for engineering expenses. Assistant Town Administrator Eldredge confirmed that the above listed documents were received by staff.

Health Department staff recommended that Engineering Works, Inc., schedule soil tests with the Health Department within seven (7) days, an application for disposal system construction permit be submitted to the Health Department within thirty (30) days and that the upgrade be completed within forty-five (45) days of the septic application approval. If these conditions are not complied with, a fine of \$100.00/day shall be issued to the property owner.

Ms. Pflieger closed the hearing.

Mr. Antoine moved to accept the recommendation as outlined by Health Department staff, 2nd by Mr. Dowgiallo. The vote was 4-0-0 with Ms. Pflieger, Mr. Dowgiallo, Mr. Antoine & Mr. DuPont all voting aye by roll call.

B. Hearing-Price/Dunne Family Trust, 43 Nehoiden Street, to consider a variance request to upgrade an existing cesspool to a Title 5 septic system. Plan prepared by Moran Engineering Associates, LLC
Variances from 310 CMR 15.211(1) & 15.227(5)

1. Per 310 CMR 15.211: To allow a proposed soil absorption system to be 6' from the East property line where 10' is required. Variance request of 4'.
2. Per 310 CMR 15.211: To allow a proposed soil absorption system to be 5' from the South property line where 10' is required. Variance request of 5'.
3. Per 310 CMR 15.211: To allow a proposed soil absorption system to be 18' from the crawl space where 20' is required. Variance request of 2'.
4. Per 310 CMR 15.227: To allow the septic tank invert to be 0.55' to high groundwater where 1' is required. Variance request of 0.45'.

Ms. Pflieger opened the hearing. Health Director O'Neill read the variances being requested. Dan Croteau from Moran Engineering Associates, Inc., was present. The application is proposing to replace an existing cesspool system with a Title 5 septic system, plan prepared by Moran Engineering Associates, Inc. dated February 15, 2021 (project 20-192). The septic plan also references a proposed 9'x16' sunroom addition on a tube and post foundation. The existing 8'x15' sunroom is proposed to be removed. The existing dwelling contains two (2) bedrooms and the septic system is designed for two (2) bedrooms. With the exception of the sunroom, there are no alterations or additions proposed at this time.

Ms. Pflieger closed the hearing.

Health Director O'Neill recommended approval with the following conditions:

1. The property shall be restricted to a maximum of two (2) bedrooms as referenced on plan dated February 15, 2021 (project 20-192) by Moran Engineering Associates, Inc.
2. No increase in habitable space or square footage allowed without the approval of the Board of Health.
3. Variance approval and conditions to be recorded at Barnstable County Land Court.

Mr. Antoine moved to approve the recommendation of the Health Director, 2nd by Mr. DuPont. The vote was 4-0-0 with Ms. Pflieger, Mr. Dowgiallo, Mr. Antoine & Mr. DuPont all voting aye by roll call.

C. Hearing-Say It Sweetly, 560A Route 28, to consider variances from the Food Code 1999 Federal Food Code

1. Chapter 4-301.12, relief requested from the requirement of a three bay sink. Alternate warewashing procedure proposed.
2. Chapter 5-203.13, relief requested from the requirement of a separate hand washing sink. Alternate handwashing location proposed.
3. Chapter 6-301.1, relief requested from the requirement of a service sink. Alternate service sink procedure proposed.

Ms. Pflieger opened the hearing. Health Director O'Neill read the variances being requested. Jessica Barbella was present. Say It Sweetly opened in 2020 without permits or prior knowledge from the

Health Department. Staff became aware of the establishment via the internet. This location was previously occupied by Dr. Cavity's Candy Shack, who had requested the same variances. The septic system for this property is designed for retail only and not food service. Wrapped food that does not require any handling or preparation is allowable for the septic system. Ms. Barbella indicated that she is handling unwrapped food on premises. The Health Department received a food service permit application for the brick & mortar business on March 3, 2021. Staff spoke with Ms. Barbella regarding a separate food service permit application for her residence. Ms. Barbella stated that she was unsure if she was going to have her residence permitted as a kitchen or if she was going to enter into an agreement with another business for use of their kitchen. Ms. Barbella would like to continue to operate her business as she has been, hence the reason for the variance request.

Ms. Barbella stated that she has entered into an agreement **with the West Chatham Grill** for use of their kitchen facilities, and has provided the Health Department **with documentation** to this effect. As of April 1, 2021, Ms. Barbella stated that she will be using the **kitchen facilities at the Mad Minnow** in Harwich Port. She will also apply to the Health Department for an application for her home kitchen.

Ms. Pflieger closed the hearing.

Should Ms. Barbella utilize only disposable traps, tongs, and utensils and not have any type of equipment that requires washing and sanitizing, a food service permit may be issued without the need for variances. If Ms. Barbella utilizes any trays, utensils or equipment that will come in contact with unwrapped food, Health Director O'Neill recommends approval of the variances with the following conditions:

1. Equipment shall be washed and sanitized in a licensed kitchen (residential or commercial).
2. No expansion of food service beyond the proposed operation.
3. The variances are non-transferrable, should the location or ownership change, variances are null and void.
4. The Health Department reserves the right to revoke these variances at any time.

Mr. Antoine moved to approve the recommendation of the Health Director, 2nd by Mr. DuPont. The vote was 4-0-0 with Ms. Pflieger, Mr. Dowgiallo, Mr. Antoine & Mr. DuPont all voting aye by roll call.

D.Hearing-105 CMR 15.216-Aggregate determination of flows and nitrogen loading, to consider the use of an aggregate facility plan for the purpose of meeting 105 CMR 15.214-216 regarding 10,000 sq. ft. of land required per bedroom in a nitrogen sensitive area located at **8 Belmont Avenue**; Map 77 Parcel A17-1; 13,488+/- square feet; credit land at 3 & 4 Belmont Avenue; 6,607+/- sq. ft. for Northern Coast Properties & Demarest Land Surveying. Plan prepared by Stephen A. Haas, P.E.

Ms. Pflieger opened the hearing. Health Director O'Neill read the request being made. John Demarest was present. The owner of the property at 8 Belmont Avenue is requesting to enter into a nitrogen loading restriction and easement agreement to obtain credit land to accommodate the one (1) bedroom per 10,000 square feet rule due to the property being in a Zone II, water recharge area. The applicant has shown that the facility land and credit land provide sufficient land area to support a two (2) bedroom dwelling at 8 Belmont Avenue. The facility land is 13,488 square feet, the proposed credit land is located across Shore Street and is 6,607 square feet. The credit land meets the requirement to be considered credit land per Title 5. A standard septic system has been designed by Stephen A. Haas.

Ms. Pflieger closed the hearing.

Health Director O'Neill recommended approval of the nitrogen aggregation plan with the following conditions:

1. A fully executed Grant of Title 5 Nitrogen Loading Restriction and Easement be recorded at the Barnstable County Registry of Deeds with a copy returned to the Health Department.
2. The property at 8 Belmont Avenue shall be restricted to two (2) bedrooms.
3. The credit land shall adhere to the prohibitions and provisions set forth in the Easement documents provided with the application.
4. The dwelling shall be served by Town Water.

Mr. Antoine moved to approve the recommendation of the Health Director, 2nd by Mr. DuPont. The vote was 4-0-0 with Ms. Pflieger, Mr. Dowgiallo, Mr. Antoine & Mr. DuPont all voting aye by roll call.

VI REPORT OF THE HEALTH DIRECTOR- FEBRUARY 2020

No report of the Health Director was discussed.

VII CORRESPONDENCE

The Board was provided with a letter from Eversource Energy stating that they intend to selectively apply herbicides in 2021 along the power line rights of way that pass through Harwich. A full copy of the letter is available in the Board of Health's meeting packet.

VIII PERMITS

ESTABLISHMENT	ADDRESS	TYPE	TYPE	TYPE
SEPTIC INSTALLER				
Barrows Excavating *				
Cape Dig *				
J. Brown, Inc. *				
J. C. Ellis Design Co Inc *				
Reis Services *				
T.W. Nickerson, Inc. *				
FOOD SERVICE				
Harwich Junior Theater *	105 Division Street	Limited Food Service		
Harwich Junior Theater *	265 Sisson Road	Limited Food Service		
Say It Sweetly (2021 NEW)	560A Route 28	Limited Food Service		
Seagulls Ice Cream & Soda Fountain (2021 NEW)	537 Route 28	1-30 seats		Frozen Dessert
St. Peters Lutheran Church *	310 Route 137	Institution		
Starbucks at Stop & Shop *	111 Route 137	1-30 seats		
Stop & Shop *	111 Route 137	Retail: Greater than 25000 sf	Milk & Cream	Take Out
The Lanyard Bar & Grill *	429 Route 28	61-150 seats		
TITLE 5 INSPECTOR				
Jason Ellis *				
MOTEL				

*2021 Renewal

Mr. Antoine moved to approve the permits as per list dated March 16, 2021, noting that the permits for Say It Sweetly and Seagulls Ice Cream and Soda Fountain will issued after satisfactory pre-opening inspections by Health Department staff have been completed, 2nd by Mr. DuPont. The vote was 4-0-0 with Ms. Pflieger, Mr. Dowgiallo, Mr. Antoine & Mr. DuPont all voting aye by roll call.

IX OTHER

Ms. Pflieger asked if staff has started to create any educational documents for the newly adopted fertilizer regulations. Assistant Town Administrator Eldredge responded that it has been put back on staff's to do list.

X ADJOURN

Mr. Antoine moved to adjourn the meeting at 7:22 p.m., 2nd by Mr. DuPont. The vote was 4-0-0 with Ms. Pflieger, Mr. Dowgiallo, Mr. Antoine & Mr. DuPont all voting aye by roll call.

Respectfully Submitted,

Jennifer Clarke

Next meeting is Tuesday, April 20, 2021 at 6:30 p.m.

Documents included in March 16, 2021 Board of Health Meeting Packet:

- March 16, 2021 Board of Health Agenda
- Draft minutes from the February 16, 2021 Board of Health meeting
- COVID-19 update dated March 4, 2021
- COVID-19 update dated February 19, 2021
- COVID-19 update dated February 12, 2021
- Memo from Massachusetts Department of Health dated February 16, 2021
- Emails from staff relating to Group 2 reclassification dated March 3, 2021
- Draft letter to Massachusetts State House (date TBD based on Board vote)
- Site Summary for 38 Periwinkle Way dated March 16, 2021
- Notice to Appear before Board of Health for 38 Periwinkle Way dated February 23, 2021
- Notice of Violation for 38 Periwinkle Way dated November 27, 2019
- Site Summary for 43 Nehoiden Street dated March 16, 2021
- Board of Health Variance application and associated documents dated February 26, 2021
- Site Summary for Say It Sweetly/560A Route 28 dated March 16, 2021
- Board of Health Variance application and associated documents dated March 1, 2021
- Site Summary for 8 Belmont Avenue dated March 16, 2021
- Nitrogen Aggregation Loading Plan and Application for 8 Belmont Avenue dated March 4, 2021
- Eversource memo dated February 19, 2021
- Any other documents submitted for/at the March 16, 2021 Board of Health meeting.



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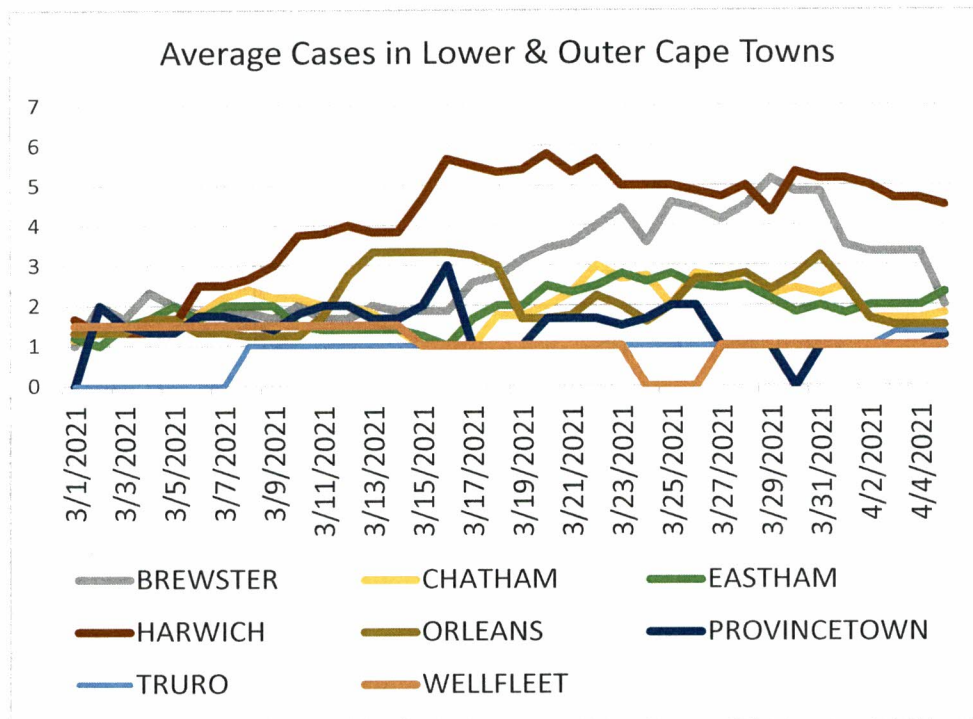
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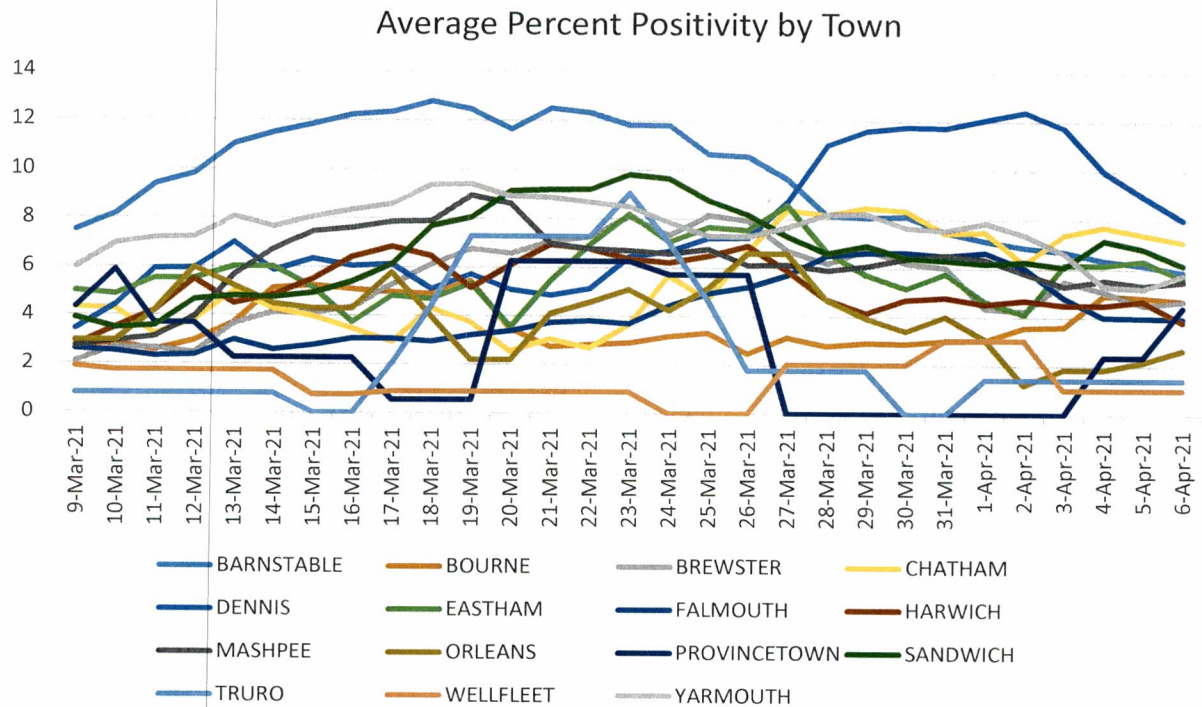
Weekly COVID-19 Update

CASES & STATISTICS

To date, Harwich has seen a cumulative total of 686 cases of COVID-19. We are currently following 53 active cases. The positivity rate has decreased to 4.98%, which moves us down to the “Yellow” designation. Over the last two weeks, the Town has seen 60 positive cases out of 1204 total tests.

Positive Cases in Towns by Week																
Dates	Barnstable	Bourne	Brewster	Chatham	Dennis	Eastham	Falmouth	Harwich	Mashpee	Orleans	P-Town	Sandwich	Truro	Wellfleet	Yarmouth	
2/22-28	70	23	3	5	7	6	30	5	20	4	0	42	0	1	31	
2/ 1-7	123	27	9	11	9	4	38	5	13	4	7	24	0	3	40	
2/8-14	211	24	13	7	26	7	26	23	32	10	5	27	2	3	59	
3/15-21	299	26	25	7	20	7	43	32	46	7	5	69	4	1	91	
3/22-28	248	46	27	15	65	15	111	30	50	14	1	52	1	1	75	
3/29-4/4	128	44	20	10	66	8	90	28	38	6	3	64	4	2	59	
4/5-7	44	15	5	2	8	2	18	11	15	3	4	13	2	0	22	





VARIANTS

Harwich was alerted this week that the state has identified the first cases of both the B.1.1.7 and P.1 variants.

COUNTY	B.1.1.7	P.1	Total
BARNSTABLE	25	44	69
BREWSTER	2	3	5
DENNIS	5	4	9
EASTHAM	1	0	1
FALMOUTH	1	1	2
HARWICH	3	1	4
MASHPEE	0	1	1
ORLEANS	0	2	2
SANDWICH	1	2	3
YARMOUTH	11	15	26
Total	49	73	122

*Number of COVID-19 variants of concern identified by town.
(Towns not listed do not have any variants identified to date)*

The B.1.1.7 variant is known to spread more easily, and has caused a rapid surge of cases in the UK, several other countries, and in parts of California, Florida, and Massachusetts. Two other variants of concern are the B.1.351 originally found in South Africa, and the P.1 variant, which originated in Brazil. To date, Harwich has not identified any cases of

B.1.351. The best defense against a rapid rise in cases from variants of concern is to prevent the spread of COVID-19.

New information from CDC shows that improving the fit and filtration of masks helps reduce the spread of the virus. Mask fit can be improved by using a mask with a nose wire and by using a mask fitter or by knotting the ear loops and tucking the sides. Mask filtration is improved by using multiple layers.

Other critical public health measures to help prevent the spread of COVID-19 include social distancing, avoiding groups, staying home when you are sick, getting tested if you have symptoms or are identified as a close contact of someone with COVID-19, and getting vaccinated when it is your turn.

VACCINE

A total of 4,401 full time Harwich residents have been fully vaccinated, and 6,791 individuals have received at least one dose.

Age	Population Size	Individuals with at least one dose	Fully Vaccinated Individuals	Partially Vaccinated Individuals
0-19 Years	1,993	58	0	43
20-29 Years	1,055	270	116	154
30-49 Years	2,146	940	451	489
50-64 Years	3,012	1,652	747	905
65-74 Years	2,551	2,095	1,578	517
75+ Years	1,833	1,776	1,509	267
Total	12,589	6,791	4,401	2,375

On Thursday April 15th a closed vaccination clinic will be held at the Harwich Community Center. This clinic is a collaboration between Outer Cape Health Services, Harwich Fire, and the Harwich Health Department. This clinic is being held for members of the “Certain Workers” designation identified by the state. We have contacted all permit holders, and scheduled them for this closed clinic. We have approximately 220 individuals signed up.

The “Certain Worker” designation includes:

- Restaurant or cafe workers (Cooks, servers, maintenance staff, managers, cashiers)
- Food, meatpacking, beverage, agriculture, consumer goods, retail, or food service workers (All staff involved in the production, processing, storage, transport, wholesale and retail sale, preparation, and service of food and consumer goods, including farm and other agricultural workers, including farm stand and nurseries)
- Grocery and convenience store workers (Cashiers, baggers, stockers, managers, maintenance staff, security staff, delivery workers, including paid shoppers)

- Food pantry workers or volunteers
- Medical supply chain workers (Workers directly involved in the manufacturing and production, packaging, transport, quality control, and sale of materials critical to the delivery of medical care)
- Vaccine development workers (Workers directly involved in research, development, manufacturing and production, packaging, transport, quality control, and sale of vaccines (COVID-19 and others))
- Transit/transportation workers (Drivers/operators, attendants, sales, administrators, security, maintenance staff, public and private bus, train/subway, passenger boat/ferries, passenger air, and automobile (including rental car, car service/limousine, taxi, and ride apps) transportation, bridge and road construction and maintenance workers, shipping port and terminal workers, commercial transportation, postal and package delivery workers)
- Public works, water, wastewater, or utility workers (Utility: Electrical generation and supply system, natural gas delivery, nuclear power plant, water supply, telephone, cable/fiber optical/broadband/cellular service workers Public works including street repair, street lighting, public park, beach, and trail maintenance workers.)
- Sanitation workers (Drivers, solid waste handlers, recycling staff, street cleaners, sewer and storm water system workers, janitors, housekeepers)
- Public health workers Public-facing federal, state, and local governmental public health workers
- Court system worker (judges, prosecutors, defense attorneys, clerks), other than court officers who are listed under first responders (Criminal court workers, including judges, prosecutors, public defenders, private defense attorneys, clerks, maintenance workers)
- Funeral directors and funeral workers (Funeral directors/morticians, other funeral workers (funeral home staff, drivers, maintenance workers, cemetery workers, funeral cosmetology workers))

Public clinics can be Pre-registered for to receive a vaccination at <https://www.mass.gov/info-details/preregister-for-a-covid-19-vaccine-appointment>.

Currently eligible participants can sign up for a vaccine at <https://vaxfinder.mass.gov/>.

TESTING

For free testing at Outer Cape Health, please call [508-905-2888](tel:508-905-2888) to make an appointment.

Testing is still available in other locations 7 days per week through Cape Cod Healthcare. Call the Community Testing Line at 508-534-7103 to make an appointment.

REMINDER

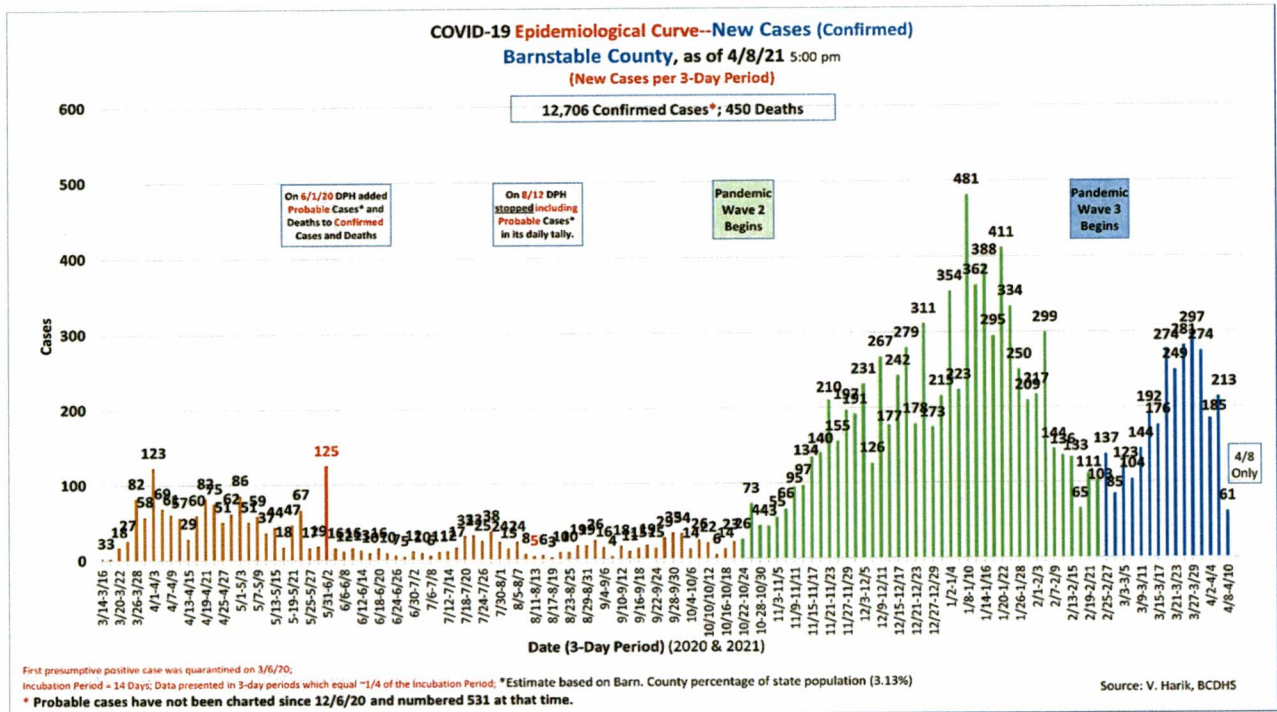
Please continue to maintain social distancing, mask use, and good hand hygiene. We need to work together as a community to minimize the spread!

Stay Safe!

~Dr. Katie O'Neill

Health Director

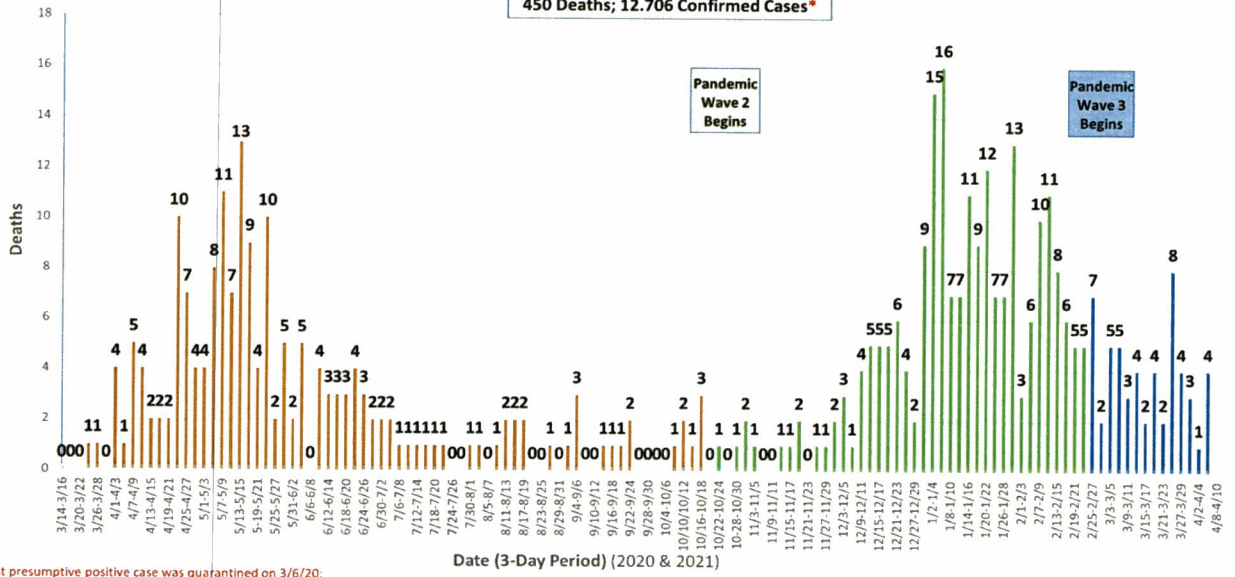
4/9/21: Barnstable County and Regional COVID-19 Update



Hospitalizations, Last Report:		Not Cumulative		Cumulative		3-Day Avg. of Persons in Hosp. (Med/Surg + ICU)	ICU Percent of Beds Occupied
		Hospital Beds Occupied (Last Report)	ICU Beds Occupied (Last Report)	Barnstable County Cases (Confirmed)	Barnstable County Deaths		
4/8/2021	Cape Cod Hospital	16	2				
	Falmouth Hospital	5	2				
		21	4	12,706	450	29.0	16%

COVID-19 Epidemiological Curve--New Deaths (Confirmed + Probable)
Barnstable County, as of 4/8/21 5:00 pm
 (New Deaths per 3-Day Period)

450 Deaths; 12,706 Confirmed Cases*





Town of Harwich

Board of Health

732 Main Street Harwich, MA 02645

508-430-7509 – Fax 508-430-7531

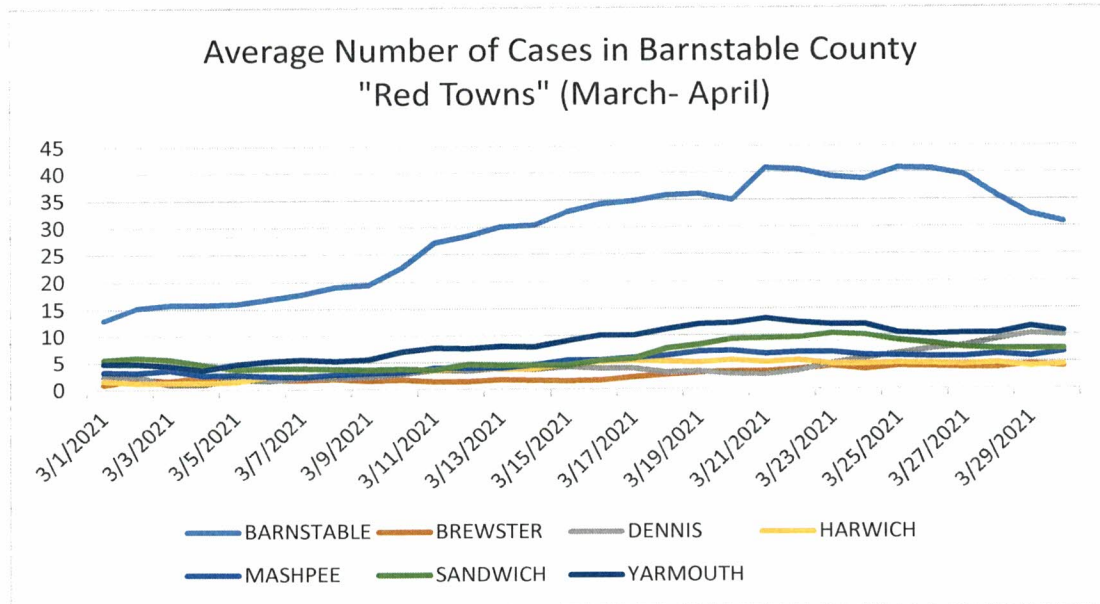
E-mail: health@town.harwich.ma.us

Weekly COVID-19 Update (April 2, 2021)

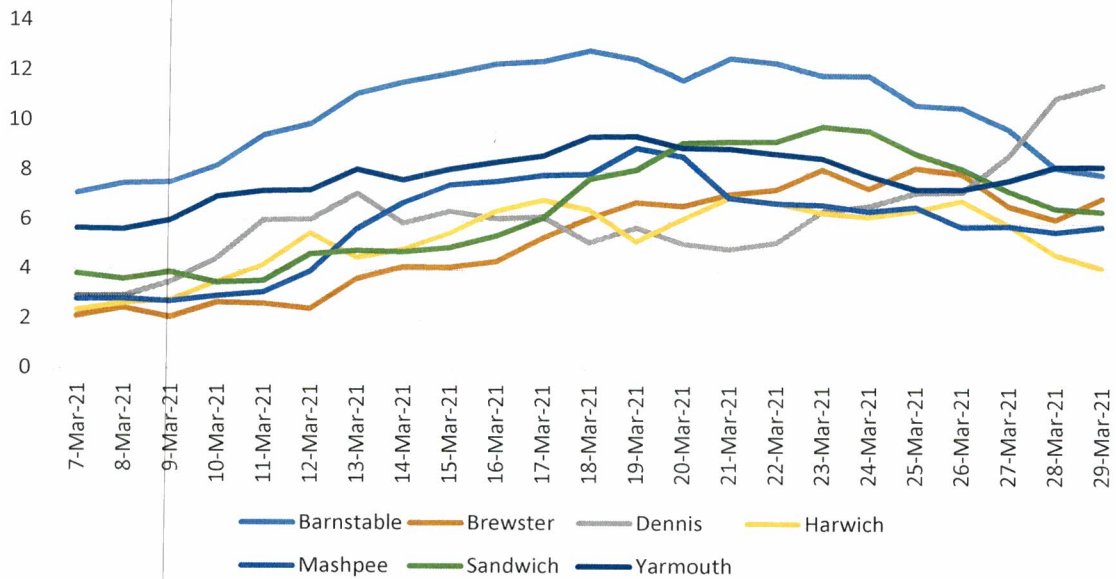
CASES & STATISTICS

To date, Harwich has seen a cumulative total of 665 cases of COVID-19. We are currently following 56 active cases. The positivity rate has increased to 5.63%, which still leaves us in the “Red” designation. Over the last two weeks, the Town has seen 62 positive cases out of 1102 total tests. The Average age of recent cases to date is approximately 42 years old, compared to all of Barnstable County, which is 38 years old.

Town	Average Age of Positive Cases (“Red Towns”)
BARNSTABLE	36
BREWSTER	48
DENNIS	45
HARWICH	42
MASHPEE	38
SANDWICH	35
YARMOUTH	41
Average	38



Average Percent Positivity in Barnstable County
"Red Towns" (March- April)



VACCINE

Age Group	Population	Individuals with at least one dose	Fully vaccinated individuals	Partially vaccinated individuals
0-19 Years	1,993	32	0	0
20-29 Years	1,055	196	99	97
30-49 Years	2,146	724	387	337
50-64 Years	3,012	1,302	589	713
65-74 Years	2,551	1,977	1,271	706
75+ Years	1,833	1,694	1,409	285
Total	12,589	5,925	3,755	2,138

A total of 3,755 full time Harwich residents have been fully vaccinated, and 5,925 individuals have received at least one dose.

On Tuesday March 30th, the Harwich Fire Department, in collaboration with Outer Cape Health, Harwich Council on Aging, and the Harwich Health Department, vaccinated 42 individuals in Senior Housing. On Monday April 5th, an additional 55 homebound individuals will also be vaccinated. A special thank you to Outer Cape Health, Emily

Mitchell, Sue Jusell, Jen Clarke, Chief LeBlanc, Deputy Chief Thorton, Paul Finn, and all of Harwich EMS for assisting in this collaborative effort. If anyone knows of a homebound individual still in need of vaccination, please contact either the Harwich Health Department at (508)-430-7509, or the Council on Aging at (508)-430-7550. This will be a continued effort to ensure that all who need to be vaccinated will be.

Starting Monday Aril 5th, people who are 55 and older will be eligible to receive the vaccine, as well as people with 1 certain medical condition.

Pre-register to receive a vaccination at <https://www.mass.gov/info-details/preregister-for-a-covid-19-vaccine-appointment>. Currently eligible participants can sign up for a vaccine at <https://vaxfinder.mass.gov/>.

TESTING

For testing options at Outer Cape Health, please call [508-905-2888](tel:508-905-2888) in advance to make a testing appointment.

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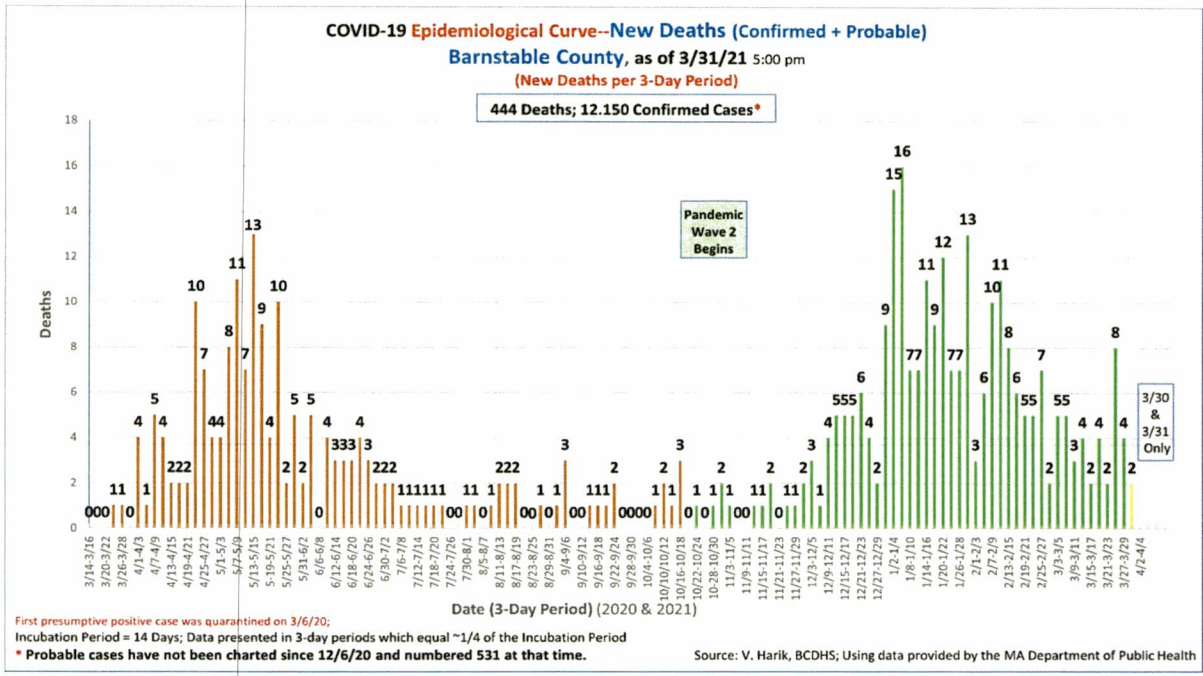
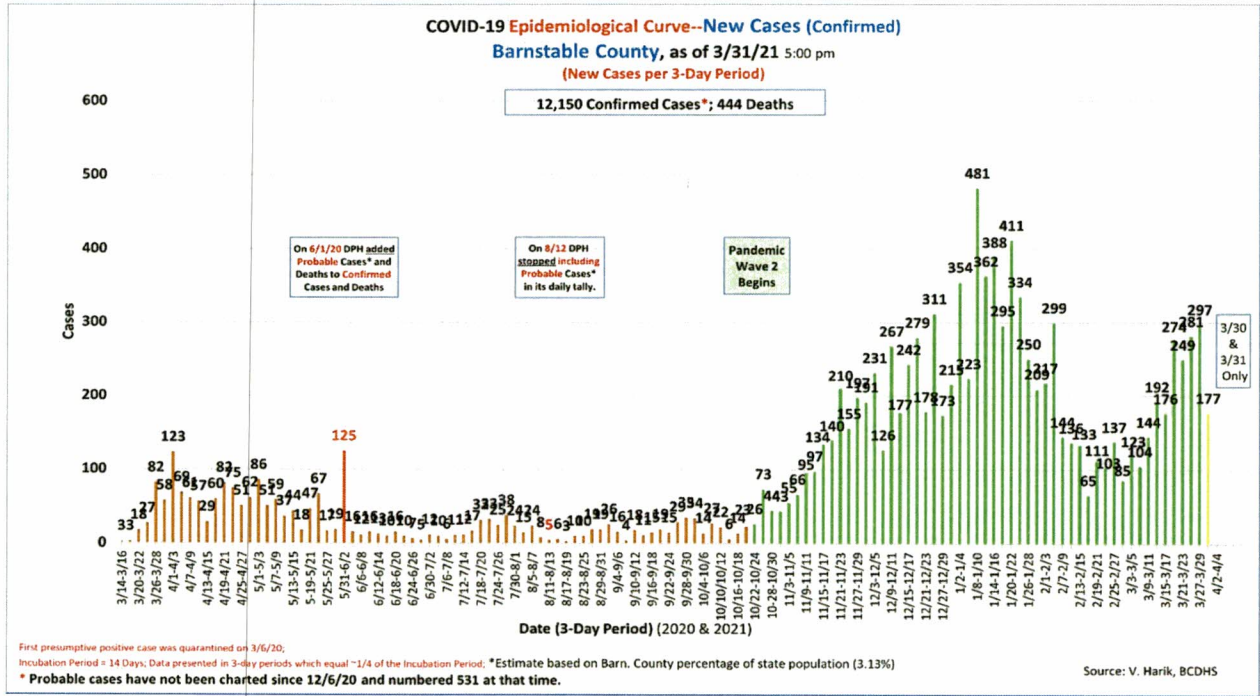
REMINDER

Please continue to maintain social distancing, mask use, and good hand hygiene. We need to work together as a community to minimize the spread!

Stay Safe!

~Dr. Katie O'Neill
Health Director

Barnstable County Health Department COVID Mini-Update: 3/31/21





Count and Rate of Confirmed COVID-19 Cases and Tests Performed in MA by City/Town, January 1, 2020 – March 30, 2021

City/Town	Total Case Count	Case Count (Last 14 Days)	Average Daily Incidence Rate per 100,000 (Last 14 days) ¹	Relative Change in Case Counts ²	Total Tests	Total Tests (Last 14 days)	Total Positive Tests (Last 14 days)	Percent Positivity (Last 14 days)	Change in Percent Positivity ³
Hampden	412	30	43.5	Higher	10177	659	31	4.72%	Higher
Hancock	17	<5	11.1	Higher	252	8	1	12.50%	Higher
Hanover	1245	76	37.8	Higher	25732	1784	83	4.65%	Higher
Hanson	824	47	31.7	Higher	16379	917	54	5.89%	Higher
Hardwick	83	5	10.7	No Change	3651	168	6	3.57%	Higher
Harvard	124	8	8.2	Higher	8734	475	8	1.68%	Higher
Harwich	665	56	21.8	Higher	17963	1102	62	5.63%	Higher
Hatfield	150	7	15.5	Higher	6796	442	8	1.81%	Higher
Haverhill	7424	210	22.7	Lower	138355	6594	248	3.76%	Lower
Hawley	<5	0	0	No Change	120	4	0	0%	No Change
Heath	7	0	0	No Change	701	48	0	0%	No Change
Hingham	1785	82	24.4	No Change	57813	3174	87	2.74%	Higher
Hinsdale	68	6	20.2	No Change	3466	231	6	2.60%	Lower
Holbrook	962	31	19.5	Higher	18866	1038	34	3.28%	Higher
Holden	1365	37	13.9	Lower	40108	2156	40	1.86%	No Change
Holland	117	6	16.7	Higher	3336	195	6	3.08%	Higher
Holliston	720	29	15.1	Lower	26002	1505	31	2.06%	Lower

Data are current as of 11:59pm on 03/30/2021; For populations <50,000, <5 cases are reported as such or suppressed for confidentiality purposes. ¹ For the calculations used to delineate Grey, Green, Yellow, and Red, please see table on page 25. ²Number of new cases occurring over the current two-week period (3/14/2021 - 3/27/2021) compared to the previous two-week period (3/7/2021 - 3/20/2021). **Higher**=number of new cases in the current two-week period higher than the number of new cases during the last two-week period. **Lower**=number of new cases in the current two-week period lower than number of new cases during the last two-week period. **No change**=number of new cases in current two-week period is equal to the number of new cases during the last two-week period. ³Change in percent positivity compared to the previous week's (3/25/2021) report. **No Change**= <0.10% difference in the percent positivity. DPH calculates rates per 100,000 population using denominators estimated by the University of Massachusetts Donahue Institute using a modified Hamilton-Perry model (Strate S, et al. Small Area Population Estimates for 2011 through 2020, report, Oct 2016.) As of 11/5/2020, the Massachusetts Department of Public Health is using the 2019 population estimates, the most current available data. **Please note:** Data for these tables are based on information available in the DPH surveillance database at a single point in time. Case counts for specific cities and towns change throughout the day as data cleaning occurs (removal of duplicate reports within the system) and new demographic information (assigning cases to their city or town of residence) is obtained.

Hospitalizations, Last Report:		Not Cumulative		Cumulative		3-Day Avg. of Persons in Hosp. (Med/Surg + ICU)	ICU Percent of Beds Occupied
		Hospital Beds Occupied (Last Report)	ICU Beds Occupied (Last Report)	Barnstable County Cases (Confirmed)	Barnstable County Deaths		
3/31/2021	Cape Cod Hospital	24	4	12,150	444	33.0	19%
	Falmouth Hospital	1	2				
		25	6				



Town of Harwich
Board of Health

732 Main Street Harwich, MA 02645
508-430-7509 – Fax 508-430-7531
E-mail: health@town.harwich.ma.us

March 12, 2021

Weekly COVID-19 Case Update

CASES AND STATISTICS

To date there have been a total of 587 cases of COVID-19 in the Town of Harwich. As of today, we are following 5 active cases of COVID-19 in Harwich residents. Our positivity rate 1.65% which is determined by the number of tests administered. There were 911 tests administered and 15 tests were positive in the last 19 weeks. We have been designated as “green” which indicates we have less than 10 cases per 100K and greater than 10 total cases.

VACCINE UPDATE

The Baker-Polito Administration announced a new preregistration signup tool will be available for the state’s 7 mass vaccination sites starting Friday, March 12. The new system will make it easier to request and book an appointment at a mass vaccination site at a nearby location when they are available. More sites will be added to the preregistration system in the coming weeks. When preregistration launches on Friday, it will replace the current booking platforms for mass vaccination sites for online booking. The COVID-19 Vaccine Scheduling Resource Line will be available to help residents without internet access or with difficulty using the internet with the preregistration process.

The Administration also announced the weekly distribution of vaccine doses statewide for different providers, reminding residents that there are 170 public vaccination sites statewide in addition to health systems that are offering appointments to their patients.

More information on vaccine sites can be found at: vaxfinder.mass.gov

The Administration also announced four dedicated educator days at mass vaccination sites and updates on vaccine distribution channels.

State Distribution:

This week, the state will receive a constrained supply of about 155,000 first doses.

This week, first doses and second dose allocations (total doses), were divided among providers as follows:

Mass vaccination sites: 83,000
Hospital Providers (both private and public): 79,000
Regional Collaboratives (12 total): 38,000

Community Health Centers: 25,000

Local Boards of Health (to complete 2nd dose appointments and support 20 disproportionately impacted communities): 25,000

Educator Vaccination Days

On March 11, pursuant to a federal directive, approximately 400,000 K-12 educators, childcare workers and K-12 school staff are eligible to receive COVID-19 vaccine in Massachusetts.

K-12 educators, childcare workers and K-12 school staff may receive vaccine from any of the 170 public vaccine sites available on mass.gov/covidvaccine.

In an effort to support the Biden-Harris Administration's directive for states to prioritize teacher vaccinations, the Administration will designate 4 days where the state's 7 mass vaccination sites will only offer 1st dose appointments for K-12 educators, child care workers and K-12 school staff.

These dates are: Saturday, March 27, Saturday, April 3, Saturday, April 10 and Sunday, April 11

Workers in this group must use the pre-registration system to request an appointment at one of the seven mass vaccination sites and attest they are a K-12 educator, childcare worker or K-12 school staff.

LOCAL EFFORTS

Cape Cod COVID-19 Vaccine Consortium, comprised of Cape Cod Healthcare (CCHC), Barnstable County (BC), Cape Cod Delegation, the towns and community health centers of Cape Cod, with support from Cape Cod Community College (4Cs), have established a large-scale vaccination site at the Cape Cod Community College gymnasium. Cape Cod Healthcare and Barnstable County Department of Health and Environment will operate the vaccination site as of March 1. It will have the capacity to administer more than 750 vaccines per day, five days per week, pending supply from the state.

With support from councils on aging, police, fire, and other departments in their respective towns, local boards of health are working to identify the most vulnerable older adults in each of their individual municipal boundaries. Elder Services of Cape Cod (the region's ASAP) is also being consulted to cross-reference and reach all vulnerable older adults.

The most up to date and valuable information on vaccination is found at: <https://www.barnstablecountyhealth.org/vaccine-information>

HOMEBOUND and VULNERABLE POPULATIONS

Boards of health within each town will identify vulnerable older adults by town via the below plan to efficiently administer the vaccine to older adults left behind by the current vaccine offerings. Vulnerable older adults will be identified into two tracks:

1. Track One: Individuals who need assistance making a vaccination appointment but are able to travel to Cape Cod Community College. Track One individuals include those who are medically vulnerable and/or with limited computer abilities or access.

a. This list will be provided to Cape Cod Healthcare, who will proactively reach out to and schedule these appointments at the Cape Cod Community College site.

2. Track Two: Individuals who are homebound, who do not drive, reside in senior housing, have other confining/limiting factors, etc.

a. This list will be provided to Catchment Area Leads (Outer Cape Health Services; Community Health Center of Cape Cod; Town of Barnstable), who will proactively reach out to and schedule appointments at community health centers, home visits, regional sites, or another location. Homebound is defined as Residents of Barnstable County that have functional impairments that prevent them from leaving their homes. This population generally includes older people with lower-than-average income levels and serious medical problems like dementia, advanced heart conditions, or arthritis. Pertaining to COVID-19, this elder residential demographic is designated as homebound due to these medical challenges/disabilities.

TRAVEL ORDER UPDATE

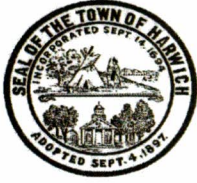
Persons Who Have Been Completely Vaccinated for COVID-19: Individuals who have received two doses of either the Moderna or Pfizer COVID-19 vaccines OR who have received a single dose of the Janssen vaccine, more than 14 days ago and who do not have symptoms, do not need to obtain a negative test prior to traveling to, or quarantine upon arrival to, Massachusetts. COVID-19 vaccinated individuals arriving in Massachusetts must have documentation of their vaccination(s), including the date(s) of administration, available if asked. This exception does not include vaccinated individuals who have symptoms of COVID-19, who must follow all testing and quarantine guidance outlined in the travel rules.

TESTING

For testing options at Outer Cape Health, please call 508-905-2888 in advance to make a testing appointment.

Testing is available in other locations 7 days per week through Cape Cod Healthcare. Call the Community Testing Line at 508-534-7103 to make an appointment.

Meggan Eldredge
Assistant Town Administrator/Interim Health Director



Town of Harwich Board of Health

732 Main Street Harwich, MA 02645
508-430-7509 – Fax 508-430-7531
E-mail: health@town.harwich.ma.us

March 22, 2021

Weekly COVID-19 Case Update

CASES AND STATISTICS

To date there have been a total of 606 cases of COVID-19 in the Town of Harwich. As of today, we are following 18 active cases of COVID-19 in Harwich residents. Our positivity rate has increased to 3.06% which is determined by the number of tests administered. Over the past two weeks there were 850 tests administered, and 26 tests were positive. We have been designated as “Yellow”, which indicates we have 10 or more averages cases per 100,000 people, or a greater than 5% positivity rate.

VACCINE UPDATE

Newly Eligible for Vaccine as of March 22, 2021:

- People who are 60 years or older
- Certain Workers
 - Restaurant or cafe workers, food workers, meatpacking, beverage, agriculture, consumer goods, retail, or food service workers, grocery and convenience store workers, food pantry workers or volunteers, medical supply chain workers, vaccine development workers, transit/transportation workers, public works, water, wastewater, or utility workers, sanitation workers, public health workers, court system workers, funeral directors and funeral workers. <https://www.mass.gov/info-details/covid-19-vaccinations-for-certain-workers>

Eligible as of April 5, 2021:

- People who are 55 years or older
- People with 1 certain medical condition
 - Asthma, Cancer, Chronic Kidney Disease, COPD, Down Syndrome, Heart Conditions, Immunocompromised State, Obesity and Severe Obesity, Pregnancy, Sickle Cell Disease, Smoking, Type 2 Diabetes.

Eligible as of April 19, 2021:

- If your group is not specifically listed in either Phase 1 or Phase 2, you will be eligible to receive the vaccine in Phase 3, which will launch April 19, 2021.

Currently Eligible Complete List:

Phase 1 listed in order of priority:

- Clinical and non-clinical health care workers doing direct and COVID-facing care
- Long term care facilities, rest homes and assisted living facilities
- First responders
- Congregate care settings
- Home-based health care workers
- Health care workers doing non-COVID-facing care

Phase 2 listed in order of priority:

- People who are 75 or older
- People who are 60 or older
- People with 2 or more certain medical conditions
- People who live or work in low income and affordable senior housing
- K-12 educators, K-12 school staff, and child care workers
- Certain workers

There are different ways to find a vaccine appointment if you're eligible:

- Preregister at [VaccineSignUp.mass.gov](https://vaccineSignUp.mass.gov) to be notified when it's your turn to schedule an appointment at one of **7 mass vaccination locations**: Fenway Park, Gillette Stadium, Reggie Lewis Center, DoubleTree Hotel in Danvers, Eastfield Mall in Springfield, Natick Mall and former Circuit City in Dartmouth.
- Use [VaxFinder.mass.gov](https://vaxfinder.mass.gov) to search for appointments at pharmacies, health care providers, and other community locations

Massachusetts' preregistration system makes it easier to request and schedule an appointment at one of the 7 mass vaccination locations. Eligible people can preregister for a COVID-19 vaccine appointment at mass vaccination locations only. More locations will be added to the system in April.

Once you sign up for preregistration, you'll receive weekly status updates. You can opt out at any time if you find an appointment elsewhere. Once an appointment is available, you'll be contacted with the opportunity to book the appointment and have 24 hours to accept it.

Massachusetts receives a limited supply of COVID-19 vaccine doses from the federal government each week. **Due to high demand and very limited supply, it may take several weeks to schedule an appointment or to be notified that an appointment is available at mass vaccination locations.**

Individuals 75 and older without access to the internet or who are unable to preregister or schedule their appointment online can call toll free 2-1-1 or (877) 211-6277 for assistance.

The most up to date and valuable information on vaccination is found at: <https://www.barnstablecountyhealth.org/vaccine-information>

PHASE IV, STEP 1 OF RE-OPENING (As of March 22, 2021)

COVID-19 Order No. 66 – Order Advancing All Communities to Phase IV, Step 1 of the Commonwealth’s Re-Opening Plan and Transitioning to a Travel Advisory Policy March 22nd, Appendix Adjusting Gathering Limits Set in COVID-19 Order No. 63.

The Baker-Polito Administration announced that Massachusetts will advance to Step 1 of Phase IV of the Commonwealth’s reopening plan on Monday, March 22. The Administration continues to take steps to reopen the Commonwealth's economy with public health metrics continuing to trend in a positive direction. This includes drops in average daily COVID cases and hospitalizations. Massachusetts also continues to be a national leader in vaccination rates. The Administration also replaced the placed the Massachusetts Travel Order originally issued in July 2020 with a Travel Advisory, effective March 22.

In addition, the Administration also announced nearly \$31 million in awards to 710 additional small businesses in the tenth round of COVID-19 relief grants administered by the Massachusetts Growth Capital Corporation (MGCC).

Phase IV, Step 1 and Gathering Changes:

On March 1, Massachusetts loosened capacity restrictions for several industries and advanced to Step 2 of Phase III of the reopening plan. Since then, hospitalizations dropped by 20% and deaths dropped by 24%. The seven day average of new cases in long-term care facilities dropped by 53%. The positive test rate remains below 2% and has been for several weeks now. The seven day average of new cases is also down over this time by 7%.

Effective Monday, March 22, all communities in Massachusetts will move into Step 1 of Phase IV of the state’s reopening plan. This will open a range of previously closed business sectors under tight capacity restrictions that are expected to be adjusted over time if favorable trends in the public health data continue. Effective on the planned advancement to Step 1 of Phase IV, the following large capacity sports and entertainment venues will be permitted to operate at a strict 12% capacity limit after submitting a plan to the Department of Public Health (DPH):

- Indoor and outdoor stadiums
- Arenas
- Ballparks

Also effective on March 22, gathering limits for event venues and in public settings will increase to 100 people indoors and 150 people outdoors. Outdoor gatherings at private residences and in private backyards will remain at a maximum of 25 people, with indoor house gatherings remaining at 10 people.

Additionally, dance floors will be permitted at weddings and other events only, and overnight summer camps will be allowed to operate this coming summer. Exhibition and convention halls may also begin to operate, following gatherings limits and event protocols. Other Phase IV sectors must continue to remain closed.

Travel Order:

Effective Monday, March 22, the Massachusetts Travel Order will be replaced with a Travel Advisory.

The new travel advisory will urge all persons entering Massachusetts, including returning residents, are advised to quarantine for 10 days upon their arrival if they have been out of the state for 24 hours or more.

The advisory does not apply to anyone in the following categories:

- Anyone who is returning to Massachusetts after an absence of fewer than 24 hours.
- Travelers who have a negative COVID-19 test result that has been administered up to 72 hours prior to their arrival in Massachusetts.
- Workers who enter Massachusetts to perform critical infrastructure functions (as specified by the Federal Cybersecurity and Infrastructure Security Agency) while they are commuting to or from or while at work.
- Travelers who are fully vaccinated (i.e. who have received two doses of either the Moderna or Pfizer COVID-19 vaccines OR who have received a single dose of the Johnson & Johnson vaccine, 14 days or more ago and who do not have symptoms).

Travelers are additionally encouraged to consult and follow the CDC's guidelines and requirements for travel.

Highlights of Changes to the Sector-Specific Workplace Safety Standards for Phase IV, Step 1 <https://www.mass.gov/resource/reopening-sector-specific-protocols-and-best-practices>

- Theaters –removed Phase IV reference; the beverage stations will follow restaurant rules
- Restaurants – opens self-serve beverages
- Museums – increases walking tour size to 25
- Gyms and Fitness Centers – reduced distancing requirement from 14ft to 6ft
- Retail – reopens food courts, following restaurant rules (*reiterates most important rules, per HHS*)
- Events – Clarifies that the 90 min limit does not apply for seated food service at events, removes reference to travel order

Phase IV Enterprises that Must Remain Closed until Phase IV, Step 2

- Amusement parks, theme parks, indoor and outdoor waterparks and ball pits
- Street festivals and parades and agricultural festivals

- Road races and other large, outdoor organized amateur or professional group athletic events
- Bars, dance clubs and nightclubs
- Beer gardens, breweries, wineries and distillates not providing seated food service

TESTING

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Katie O'Neill
Health Director

3/21/21: Barnstable County and Regional COVID-19 Daily Update

(N.B. I am no longer attempting to tally new probable cases alongside new confirmed cases. I have not received information on probable cases since 12/6/20, at which time Barnstable County had logged a total of 531.)

Good Morning All.

The towns of Barnstable and Yarmouth have returned to the highest risk (red) category in terms of average 2-week new case numbers.

The first case of the Brazilian variant P1 has been announced in Massachusetts in Barnstable County (30 year-old female). The contribution in Barnstable County to the new case numbers of any variants is unknown at this time.

In follow up to discussions between the relevant town health agents, the County, and the DPH, the DPH has stated that it will deploy additional testing resources to the mid-Cape region.

SUMMARY:

1. New Cases: DPH new cases reported yesterday:

Barnstable County:	98 new cases (cases continue to increase--mid-Cape sub-region)
Martha's Vineyard:	2 new cases
Nantucket:	0 new cases

2. Hospitalizations and Fatalities: 3-day avg. hospitalizations (now **23**) has increased. **5** patients were in the ICU yesterday afternoon. There were **2 COVID fatalities** reported Friday-Sunday. CCH and Falmouth Hospital have re-opened to limited visitation.

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3. Schools and Childcare Centers: Due to the mildness of the flu season the DPH has **removed the requirement** that all school children receive a flu vaccination on or

before 2/28/21. **School districts remain in a hybrid learning model.** However, **DESE Commissioner Jeffrey Riley has announced plans which will compel schools to return to 100% in-person learning, starting with elementary schools, in April.**

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Barnstable County: 4.12% (vs. 3.22%) (**higher** vs. previous fortnight)

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5. Weekly Town Risk, and Statewide Cluster Analyses: See charts below (analysis of 3/11/21 data is pending).

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-Groups eligible for vaccination now are those in Phase 1, and Phase 2/Group 1 (persons aged 75+), and Phase 2/Group 2 (65+, 2+ comorbidities, residents and staff of low-income senior housing), and (effective 3/11) Phase 2/Group 3 --K-12 and early education/childcare teachers and staff, **depending upon availability of vaccine.**

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-**The DPH has begun reporting vaccination progress age group and by town.** Below is a summary table for Barnstable County by age group.

Nantucket's 7-day average cases per 100,000 population (now 24/100K) has dropped since last week. On average (7-day) Nantucket is now picking up **3** new cases per day. **9 cases** were reported over the weekend (Friday to Sunday, inclusive).

Martha's Vineyard's 7-day average cases per 100,000 population (12/100K) remains low but has increased. On average Dukes County is gaining approximately **2** new cases per day. **2 cases** were reported over the weekend (Friday to Sunday, inclusive).

Trailing 14-Day Testing and Cases by County:

In the context of adequate availability of testing and contact tracing, which our three counties appear to have achieved, **a test percent positivity rate below 5% suggests that an outbreak is on the way to containment.** Rates below 3% and 1% are further important containment milestones.

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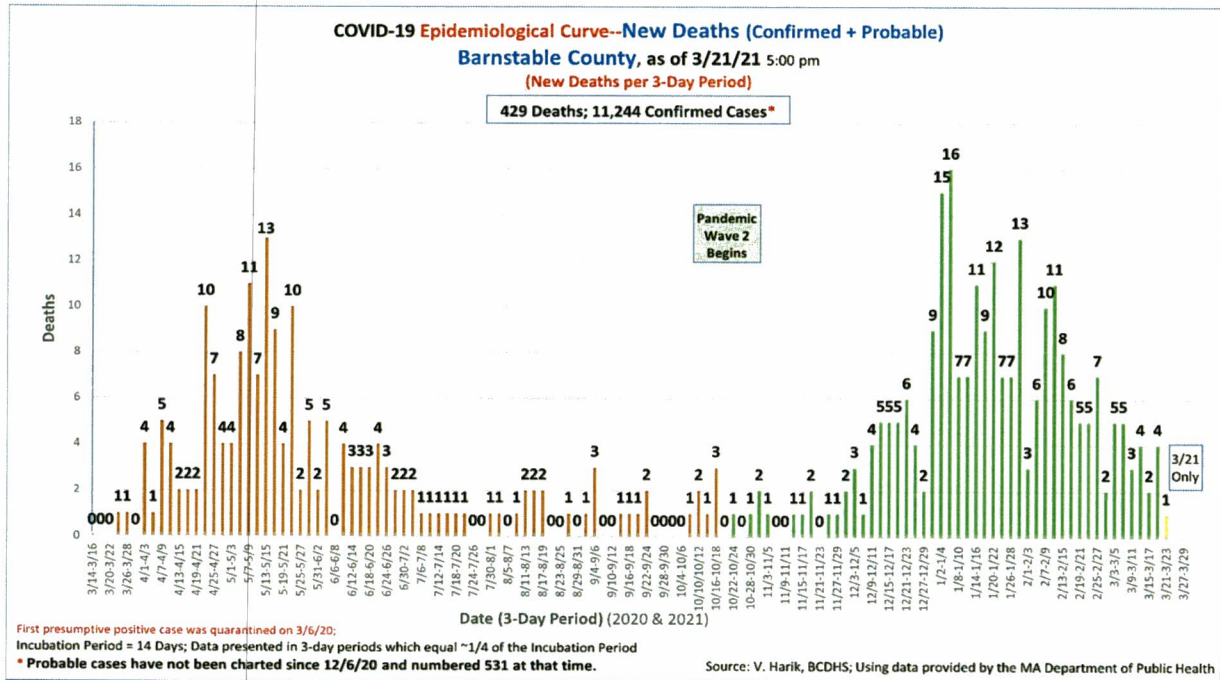
2. Hospitalizations and Fatalities

Hospitalizations and acuity of illness have decreased very significantly since the double peaks of the Wave 2 surge seen in mid-January and early February (corresponding Thanksgiving and Christmas holidays). Cape Cod Hospital and Falmouth Hospital have **resumed limited visitation** of inpatients.

Hospitalizations, Last Report:		Not Cumulative		Cumulative		3-Day Avg. of Persons in Hosp. (Med/Surg + ICU)	ICU Percent of Beds Occupied
		Hospital Beds Occupied (Last Report)	ICU Beds Occupied (Last Report)	Barnstable County Cases (Confirmed)	Barnstable County Deaths		
3/21/2021	Cape Cod Hospital	19	3				
	Falmouth Hospital	1	2				
		20	5	11,244	429	23.3	20%

Since DPH reporting of hospitalizations has a 2-day lag Tina Shaw of CCHC is providing me with more recent information (thank you Tina). Yesterday afternoon CCHC reported that there were **25 COVID patients in hospital, 5 of which were in the CCH ICU.**

Fatalities: **2** fatalities were reported over the weekend. The total is **429.**



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DESE and the DPH (memo of 1/8/21) announced that they are seeking to introduce COVID-19 screening testing using a pooled strategy in the school setting. Schools may elect to participate by responding to a survey that DESE/DPH have posted. The status of this initiative is unclear at this time.

~~For the 2020-2021 school year the DPH has mandated that all school children be vaccinated for seasonal influenza. This week the DPH extended the deadline for doing so from 12/31/20 to 2/28/21. This mandate has been canceled by the DPH.~~

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Additional testing locations in Barnstable County for both symptomatic and asymptomatic persons remain open in **Falmouth** at the Fairgrounds and in **Hyannis** at Cape Cod Hospital (the Melody Tent site has been given over to vaccination clinics). Daily testing capacity is 50 at the Falmouth site and 350 at the Hyannis site. Neither site is open daily and persons must call ahead for an appointment. Details: <https://www.capecodhealth.org/medical-services/infectious-disease/coronavirus/covid-19-testing-process/>.

In late December additional testing by **Outer Cape Community Health Services** began and continues at its 3 locations in Wellfleet, Harwich Port, and Provincetown (<https://outercapex.org/2020/12/23/outer-cape-health-services-to-offer-covid-19-asymptomatic-testing-beginning-december-23/>). The **Community Health Center of Cape Cod** is also offering testing at its locations. These sites may not open be daily and persons must call ahead for an appointment.

Eligibility criteria for the testing include residency in Barnstable County. Testing is done by appointment only. Tests cost \$75, \$110 for travel-related tests, and no one will be turned away if unable to pay for a test.

DPH-mandated **routine testing** in skilled nursing facilities/long term care settings (SNF/LTC) continues. This provides critical surveillance and allows these facilities to stay ahead of asymptomatic spread amongst staff and residents. Routine testing in SNF/LTC settings is conducted weekly for staff.

In addition, the State's **BinaxNOW rapid testing program** (available to **schools**) has been extended to visitors of **nursing homes** and rest home residents (LTC settings) to allow visitation of residents while limiting the risk of infection from visitors. DPH has published guidance on this. The program has also been extended to **homeless shelters** and management of these facilities may apply to the EEC and DPH for testing kits.

5. Weekly Town Risk and Statewide Cluster Analyses

MA DPH Data Dashboard, WEEKLY REPORT of 3/18/21 (for the Period 2/28/21 to 3/13/21)										
City/Town	Population	(March 2020 to Present) Total Case Count	Case Count Last 14 Days	Average Daily Incidence Rate per 100K	Relative Change in Case Count	(March 2020 to Present) Total Tests	Total Tests Last 14 Days	Positive Tests Last 14 Days	Percent Positivity Last 14 Days	Change in Percent Positivity
Barnstable	44,773	3,283	283	45.1	Higher	64,532	3,954	296	7.49%	Higher
Bourne	21,026	1,077	44	14.9	Lower	37,211	2,395	56	2.34%	No Change
Brewster	9,926	392	16	11.5	Higher	16,134	799	16	2.00%	Higher
Chatham	5,830	276	16	19.6	No Change	8,042	365	17	4.66%	Higher
Dennis	13,088	601	31	16.9	Higher	16,939	899	32	3.56%	Higher
Eastham	4,603	134	12	18.6	Lower	4,522	261	14	5.36%	Lower
Falmouth	31,190	1,245	50	11.5	Lower	53,504	2,801	60	2.14%	Lower
Harwich	12,589	606	23	13.1	Higher	16,828	850	26	3.06%	Higher
Mashpee	15,535	666	32	14.7	No Change	22,118	1,344	41	3.05%	Higher
Orleans	5,620	260	13	16.5	Higher	6,483	368	15	4.08%	Higher
Provincetown	2,583	69	7	19.4	Higher	4,484	223	8	3.59%	Higher
Sandwich	21,078	945	47	15.9	Lower	26,352	1,691	54	3.19%	Lower
Truro	1,968	39	1	3.6	Higher	1,965	111	1	0.90%	Higher
Wellfleet	2,760	61	5	12.9	Higher	2,895	199	6	3.02%	Higher
Yarmouth	24,062	1,218	89	26.4	Higher	34,340	1,615	95	5.88%	Higher
Barnstable County	216,629	10,872	669	22.1	Higher	316,349	17,875	737	4.12%	Higher
Aquinnah	261	1	0	0	No Change	517	10	0	0%	No Change
Chilmark	759	16	1	9.4	Lower	3,543	139	1	0.72%	Lower
Edgartown	4,086	264	3	5.2	Lower	11,306	552	3	0.54%	Lower
Gosnold	45	5	0	0	No Change	127	2	0	0%	No Change
Oak Bluffs	5,209	236	7	9.6	Lower	7,656	334	9	2.69%	Higher
Tisbury	4,174	265	5	8.6	Lower	14,238	616	5	0.81%	Lower
West Tisbury	2,871	94	1	2.5	Lower	5,051	227	1	0.44%	Lower
Dukes County	17,404	886	18	7.0	Lower	42,438	1,880	19	1.01%	Lower
Nantucket	11,416	1,221	58	36.3	Higher	24,494	1,485	59	3.97%	Higher
Dukes and Nantucket Counties	28,820	2,105	75	18.6	Higher	66,932	3,365	78	2.32%	Higher
State	6,964,383	572,278	19,036	19.5	Lower	17,607,605	1,193,281	21,789	1.83%	No Change

Data Source: MA DPH, 3/18/21 Weekly COVID Report (<https://www.mass.gov/info-details/covid-19-response-reporting>); Analysis: V. Harik BCDHS.

Massachusetts COVID Testing Rates, As Applied to Barnstable County (Thru 3/13/21)

Sources: Census.gov; MA DPH Weekly COVID Report, 3/18/21. Analysis: V. Harik, BCDHS

	MA	Barnstable County
Population Estimate (via DPH)	6,964,383	216,629
Barnstable County % of MA Pop.		3.11%
Barn. County % of Total MA Tests		1.80%
Barn. County % of MA Tests, Past Two Weeks		1.50%
Barn. County % of MA <u>Total Confirmed</u> Cases		1.90%
Barn. County % of MA <u>Confirmed Cases, Past Two Weeks</u>		3.51%
MA % Positive Tests Last 14 Days		1.83%
Barnstable County % Positive Tests Last 14 Days		4.12%

Active COVID Clusters by Exposure Setting Type for the Period 2/14/21 to 3/13/21 (as of 3/18/21)									
Source: https://www.mass.gov/info-details/covid-19-response-reporting . Tabulation: V. Harik, Barnstable County DHS									
Sorted by Number of Cases in New Cluster Settings									
Exposure Setting	New Clusters (Identified 2/14/21 – 3/13/21)			Ongoing Clusters (Cluster Identified Prior to 2/14/21 But Not Meeting Criteria for Closing)			Total		
	Clusters	Confirmed Cases	Close Contacts	Clusters	Confirmed Cases	Close Contacts	Clusters	Confirmed Cases	Close Contacts
1 Household	6,148	15,670	0	17,174	2,426	0	23,322	18,096	0
2 Child Care	72	245	240	219	162	162	291	407	402
3 Colleges & Universities	31	224	89	59	65	51	90	289	140
4 Long Term Care Facilities	25	91	0	121	248	0	146	339	0
5 K-12 Schools	15	74	82	36	3	45	51	77	127
6 Organized Athletics/Camps	14	66	174	59	14	85	73	80	259
7 Restaurants & Food Courts	15	63	21	27	8	4	42	71	25
8 Industrial Settings	11	57	6	41	54	55	52	111	61
9 Social Gatherings	9	52	39	13	7	13	22	59	52
10 Retail & Services	9	40	2	42	25	8	51	65	10

6. Vaccination

Groups eligible for vaccination now are those in Phase 1, Phase 2/Group 1 (persons aged 75+), and Phase 2/Group 2 (65+, 2+ comorbidities, and residents and staff of low-income senior housing) depending upon availability of vaccine.

Caregivers (regardless of age) accompanying a 75+ person to their vaccination appointment remain eligible for vaccination and can receive vaccination under these circumstances at DPH mass vaccination sites. Local vaccination clinics may also allow this, but most are not doing so because of constrained vaccine supplies.

-Phase 2 of the State Vaccination Plan began on February 1. **On March 11th K-12 teachers and staff and childcare teachers and staff became eligible for vaccination.**

The DPH has released the timeline by which all remaining groups will become eligible for vaccination:

Timeline for remaining groups:

March 22nd : Residents 60+ and certain workers (see <https://www.mass.gov/info-details/covid-19-vaccinations-for-certain-workers>)

April 5th : Residents 55+ and residents with one certain medical condition

April 19th: General public ages 16 years of age and older

3/19/21: Barnstable County and Regional COVID-19 Daily Update

(N.B. I am no longer attempting to tally new probable cases alongside new confirmed cases. I have not received information on probable cases since 12/6/20, at which time Barnstable County had logged a total of 531.)

Good Morning All.

MA Vaccination Eligibility Timeline for all remaining groups has been released: The DPH has released the timeline by which all remaining groups will become eligible for vaccination:

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The following workers become eligible for vaccination on March 22, 2021:	
Worker category	Definition / examples (if applicable)
Restaurant or cafe workers	Cooks, servers, maintenance staff, managers, cashiers
Food, meatpacking, beverage, agriculture, consumer goods, retail, or food service workers	All staff involved in the production, processing, storage, transport, wholesale and retail sale, preparation, and service of food and consumer goods, including farm and other agricultural workers, including farm stand and nurseries
Grocery and convenience store workers	Cashiers, baggers, stockers, managers, maintenance staff, security staff
Food pantry workers or volunteers	
Medical supply chain workers	Workers directly involved in the manufacturing and production, packaging, transport, quality control, and sale of materials critical to the delivery of medical care
Vaccine development workers	Workers directly involved in research, development, manufacturing and production, packaging, transport, quality control, and sale of vaccines (COVID-19 and others)
Transit/transportation workers	Drivers/operators, attendants, sales, administrators, maintenance staff, public and private bus, train/subway, passenger boat/ferries, passenger air, and automobile (including rental car, car service/limousine, taxi, and ride apps) transportation, bridge and road construction and maintenance workers, shipping port and terminal workers, commercial transportation
Public works, water, wastewater, or utility workers	Utility: Electrical generation and supply system, natural gas delivery, nuclear power plant, water supply, telephone, cable/fiber optical/broadband/cellular service workers Public works including street repair, street lighting, public park, beach, and trail maintenance workers.
Sanitation workers	Drivers, solid waste handlers, recycling staff, street cleaners, sewer and storm water system workers
Public health workers	Public-facing federal, state, and local governmental public health workers
Court system worker (judges, prosecutors, defense attorneys, clerks), other than court officers who are listed under first responders	Criminal court workers, including judges, prosecutors, public defenders, private defense attorneys, clerks, maintenance workers
Funeral directors and funeral workers	Funeral directors/morticians, other funeral workers (funeral home staff, drivers, maintenance workers, cemetery workers, funeral cosmetology workers)

The first case of the Brazilian variant P1 has been announced in Massachusetts in Barnstable County (30 year-old female).

SUMMARY:

1. New Cases: DPH new cases reported yesterday:

Barnstable County:	82 new cases (cases continue climb--mid-Cape sub-region)
Martha's Vineyard:	5 new cases
Nantucket:	3 new cases (cases continue to climb)

2. Hospitalizations and Fatalities: 3-day avg. hospitalizations (now **19**) remain in the 'teens (they were in the mid-60s in January during the post-holiday surge). ICU patient numbers have been stable, between **2 to 5** patients per day (in CCH). There were **3 COVID fatalities** reported yesterday. CCH and Falmouth Hospital have re-opened to limited visitation.

The first week of March marked the **one-year anniversary** of the recognition of the first COVID case in Massachusetts. In year 1 of this pandemic the **Barnstable County Case Fatality Rate (CFR) is 4%**, behind only Berkshire and Franklin Counties (which are also remote, rural locales), and is markedly higher than the **state CFR (2.8%)**.

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3. Schools and Childcare Centers: Due to the mildness of the flu season the DPH has **removed the requirement** that all school children receive a flu vaccination on or before 2/28/21. **School districts remain in a hybrid learning model.** However, **DESE Commissioner Jeffrey Riley has announced plans which will compel schools to return to 100% in-person learning, starting with elementary schools, in April.**

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-**The DPH has begun reporting vaccination progress age group and by town.** Below is a summary table for Barnstable County by age group.

7. COVID Mutation and Changes in Transmissibility/Virulence/Other: **There are four variants of concern: B117 (UK), B1351 (S. Africa), P1 (Brazil), and B1526 (New York City, which emerged in November).** All four appear to be significantly more transmissible than the virus which dominated Wave 1 of the pandemic. Within two months of the B117 variant being identified in the UK (October) it became the dominant strain circulating there. The CDC is now posting surveillance information on the emergence of the B117 variant in the US: <https://www.cdc.gov/coronavirus/2019-ncov/transmission/variant-cases.html>. Existing vaccines may be less effective against these new strains. The degree to which this may be so is being investigated. Moderna and Pfizer are working on a booster shot to counter these new strains.

-B1526 now accounts for 40% of new cases in NYC

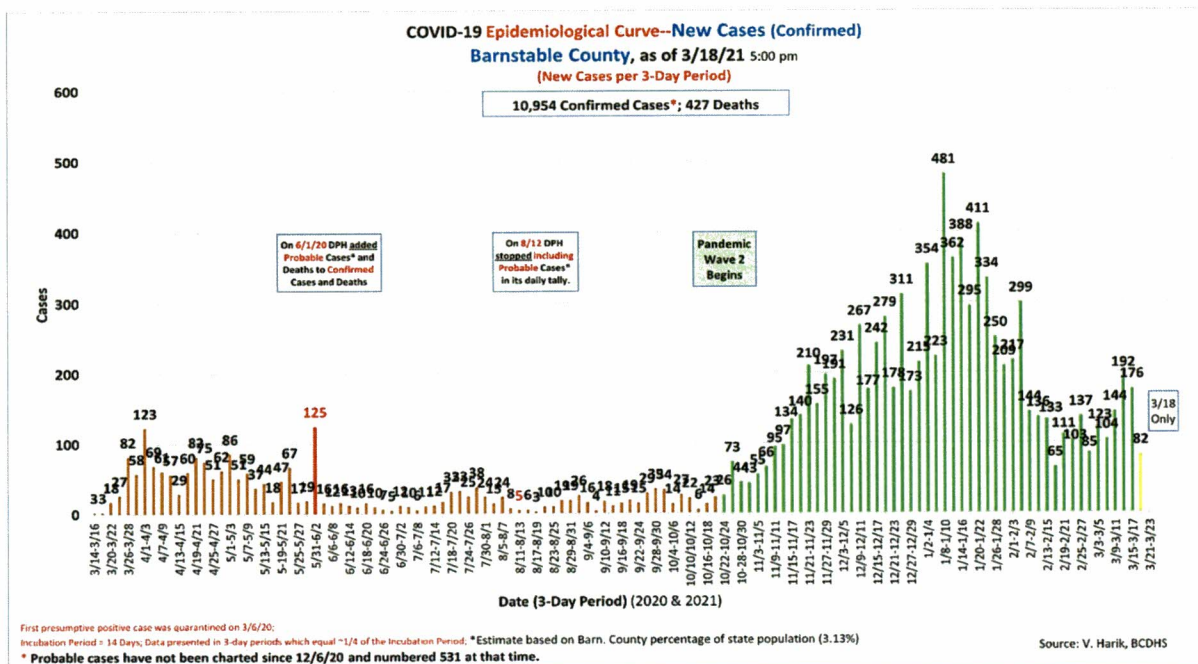
-**B117 and B1351 have been identified in Massachusetts.**

-**The first case of the Brazilian variant P1 has been announced in Massachusetts in Barnstable County.**

REPORT DETAIL:

1. New Cases

Daily new case numbers in Barnstable County are moving upward again, following a major decline since the holiday season surge. **192 cases** were reported over the weekend (Friday to Sunday, inclusive), a further 176 cases were reported Monday-Wednesday, and 82 cases were reported yesterday. **The case increases are most prominent in the mid-Cape region.** The 7-day average new cases per 100,000 has increased to **30/100K**, with Barnstable County acquiring an **average of 64 cases per day over the past 7 days.**



Nantucket's **7-day average cases per 100,000 population (now 45/100K)** remains high. On average (7-day) Nantucket is now picking up **5 new cases per day. 26 cases** were reported over the weekend (Friday to Sunday, inclusive), **7 new cases** were reported yesterday.

Martha's Vineyard's 7-day average cases **per 100,000 population (4/100K)** remains very low. On average Dukes County is gaining approximately **1.4 new cases per day. 5 cases** were reported yesterday.

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In the context of adequate availability of testing and contact tracing, which our three counties appear to have achieved, **a test percent positivity rate below 5% suggests that**

an outbreak is on the way to containment. Rates below 3% and 1% are further important containment milestones.

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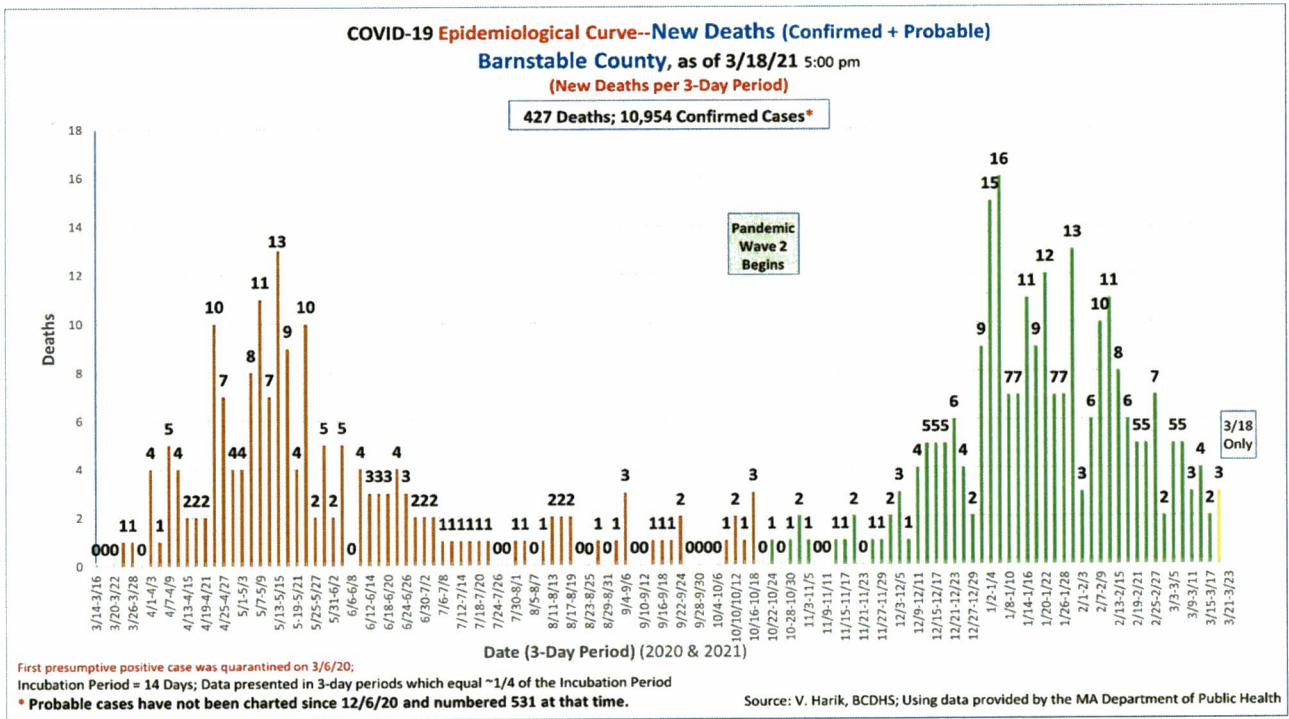
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		Hospital Beds Occupied (Last Report)	ICU Beds Occupied (Last Report)	Barnstable County Cases (Confirmed)	Barnstable County Deaths		
3/18/2021	Cape Cod Hospital	12	3				
	Falmouth Hospital	2	1				
		14	4	10,954	427	19.3	22%

Since DPH reporting of hospitalizations has a 2-day lag Tina Shaw of CCHC is providing me with more recent information (thank you Tina). Yesterday afternoon CCHC reported that there were **18 COVID patients in hospital**, 4 of which were in the CCH ICU.

Fatalities: 3 fatalities were reported yesterday. The total is **427**.



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Eligibility criteria for the testing include residency in Barnstable County. Testing is done by appointment only. Tests cost \$75, \$110 for travel-related tests, and no one will be turned away if unable to pay for a test.

DPH-mandated **routine testing** in skilled nursing facilities/long term care settings (SNF/LTC) continues. This provides critical surveillance and allows these facilities to stay ahead of asymptomatic spread amongst staff and residents. Routine testing in SNF/LTC settings is conducted weekly for staff.

In addition, the State's **BinaxNOW rapid testing program** (available to **schools**) has been extended to visitors of **nursing homes** and rest home residents (LTC settings) to allow visitation of residents while limiting the risk of infection from visitors. DPH has published guidance on this. The program has also been extended to ~~childcare centers~~ (? **Checking...**) and **homeless shelters** and management of these facilities may apply to the EEC and DPH for testing kits.

5. Weekly Town Risk and Statewide Cluster Analyses (3/17/21 Update in process)

MA DPH Data Dashboard, WEEKLY REPORT of 3/11/21 (for the Period 2/21/21 to 3/6/21)										
City/Town	Population	(March 2020 to Present) Total Case Count	Case Count Last 14 Days	Average Daily Incidence Rate per 100K	Relative Change in Case Count	(March 2020 to Present) Total Tests	Total Tests Last 14 Days	Positive Tests Last 14 Days	Percent Positivity Last 14 Days	Change in Percent Positivity
Barnstable	44,773	3,094	180	28.7	Higher	62,392	3,868	193	4.99%	Higher
Bourne	21,026	1,052	50	17.0	Lower	36,039	2,519	60	2.38%	Lower
Brewster	9,926	386	14	10.1	Higher	15,818	886	15	1.69%	Higher
Chatham	5,830	272	16	19.6	Higher	7,873	398	16	4.02%	Higher
Dennis	13,088	575	15	8.2	Lower	16,485	987	19	1.93%	Lower
Eastham	4,603	129	13	20.2	Lower	4,397	301	17	5.65%	Lower
Falmouth	31,190	1,222	56	12.8	Lower	52,069	2,824	65	2.30%	Lower
Harwich	12,589	587	12	6.8	Lower	16,387	911	15	1.65%	Lower
Mashpee	15,535	639	32	14.7	Lower	21,373	1,222	35	2.86%	Higher
Orleans	5,620	251	9	11.4	Lower	6,298	403	10	2.48%	Lower
Provincetown	2,583	65	5	13.8	Higher	4,341	256	7	2.73%	Higher
Sandwich	21,078	919	64	21.7	Higher	25,596	1,887	69	3.66%	Lower
Truro	1,968	38	0	0	Higher	1,892	100	0	0%	Lower
Wellfleet	2,760	59	3	7.8	Higher	2,785	172	4	2.33%	Higher
Yamouth	24,062	1,164	60	17.8	Higher	33,512	1,670	67	4.01%	Higher
Barnstable County	216,629	10,452	529	17.4	Higher	307,257	18,404	592	3.22%	Higher
Aquinnah	261	0	0	0	No Change	513	14	0	0%	No Change
Chilmark	759	16	1	18.8	Higher	3,479	176	2	1.14%	Higher
Edgartown	4,086	264	8	14.0	No Change	11,081	632	9	1.42%	Lower
Gosnold	45	5	0	0	No Change	126	1	0	0%	No Change
Oak Bluffs	5,209	232	7	9.6	No Change	7,488	419	7	1.67%	No Change
Tisbury	4,174	264	8	13.7	No Change	13,970	745	8	1.07%	No Change
West Tisbury	2,871	94	0	10.0	Lower	4,969	297	4	1.35%	Lower
Dukes County	17,404	880	25	11.9	No Change	41,626	2,284	30	1.31%	Lower
Nantucket	11,416	1,187	30	18.8	Higher	23,828	1,700	31	1.82%	Higher
Dukes and Nantucket Counties	28,820	2,066	59	14.6	Higher	65,454	3,984	61	1.53%	Higher
State	6,964,383	562,394	19,791	20.3	Lower	17,019,491	1,245,674	22,843	1.83%	Lower

Data Source: MA DPH, 3/11/21 Weekly COVID Report (<https://www.mass.gov/info-details/covid-19-response-reporting>); Analysis: V. Harik BCDHS.

Active COVID Clusters by Exposure Setting Type for the Period 2/7/21 to 3/6/21 (as of 3/11/21)									
Source: https://www.mass.gov/info-details/covid-19-response-reporting . Tabulation: V. Harik, Barnstable County DHS									
Sorted by Number of Cases in New Cluster Settings									
Exposure Setting	New Clusters (Identified 2/7/21 – 3/6/21)			Ongoing Clusters (Cluster Identified Prior to 2/7/21 But Not Meeting Criteria for Closing)			Total		
	Clusters	Confirmed Cases	Close Contacts	Clusters	Confirmed Cases	Close Contacts	Clusters	Confirmed Cases	Close Contacts
1 Household	6,311	16,149	---	21,753	3,172	---	28,064	19,321	---
2 Child Care	64	268	213	244	114	211	308	382	424
3 Colleges & Universities	37	257	86	50	82	30	87	339	116
4 Organized Athletics/Camps	20	97	253	59	19	111	79	116	364
5 Long Term Care Facilities	22	93	---	136	351	---	158	444	---
6 Industrial Settings	14	82	38	39	51	26	53	133	64
7 Social Gatherings	7	51	16	21	11	14	28	62	30
8 Retail & Services	10	48	7	46	35	16	56	83	23
9 K-12 Schools	8	41	53	42	13	43	50	54	96
10 Restaurants & Food Courts	10	36	11	33	11	5	43	47	16

6. Vaccination

Groups eligible for vaccination now are those in Phase 1, Phase 2/Group 1 (persons aged 75+), and Phase 2/Group 2 (65+, 2+ comorbidities, and residents and staff of low-income senior housing) depending upon availability of vaccine.

Caregivers (regardless of age) **accompanying a 75+ person to their vaccination appointment** remain eligible for vaccination and can receive vaccination under these circumstances at DPH mass vaccination sites. Local vaccination clinics may also allow this, but most are not doing so because of constrained vaccine supplies.

-Phase 2 of the State Vaccination Plan began on February 1. **On March 11th K-12 teachers and staff and childcare teachers and staff became eligible for vaccination.**

The DPH has released the timeline by which all remaining groups will become eligible for vaccination:

Timeline for remaining groups:

March 22nd : Residents 60+ and certain workers (see <https://www.mass.gov/info-details/covid-19-vaccinations-for-certain-workers>)

April 5th : Residents 55+ and residents with one certain medical condition

April 19th: General public ages 16 years of age and older

The following workers become eligible for vaccination on March 22, 2021:

Worker category	Definition / examples (if applicable)
Restaurant or cafe workers	Cooks, servers, maintenance staff, managers, cashiers
Food, meatpacking, beverage, agriculture, consumer goods, retail, or food service workers	All staff involved in the production, processing, storage, transport, wholesale and retail sale, preparation, and service of food and consumer goods, including farm and other agricultural workers, including farm stand and nurseries
Grocery and convenience store workers	Cashiers, baggers, stockers, managers, maintenance staff, security staff
Food pantry workers or volunteers	
Medical supply chain workers	Workers directly involved in the manufacturing and production, packaging, transport, quality control, and sale of materials critical to the delivery of medical care
Vaccine development workers	Workers directly involved in research, development, manufacturing and production, packaging, transport, quality control, and sale of vaccines (COVID-19 and others)
Transit/transportation workers	Drivers/operators, attendants, sales, administrators, maintenance staff, public and private bus, train/subway, passenger boat/ferries, passenger air, and automobile (including rental car, car service/limousine, taxi, and ride apps) transportation, bridge and road construction and maintenance workers, shipping port and terminal workers, commercial transportation
Public works, water, wastewater, or utility workers	Utility: Electrical generation and supply system, natural gas delivery, nuclear power plant, water supply, telephone, cable/fiber optical/broadband/cellular service workers Public works including street repair, street lighting, public park, beach, and trail maintenance workers.
Sanitation workers	Drivers, solid waste handlers, recycling staff, street cleaners, sewer and storm water system workers
Public health workers	Public-facing federal, state, and local governmental public health workers
Court system worker (judges, prosecutors, defense attorneys, clerks), other than court officers who are listed under first responders	Criminal court workers, including judges, prosecutors, public defenders, private defense attorneys, clerks, maintenance workers
Funeral directors and funeral workers	Funeral directors/morticians, other funeral workers (funeral home staff, drivers, maintenance workers, cemetery workers, funeral cosmetology workers)

Vaccination at local clinics during Phase 2 is by appointment only and **appointments are announced and able to be scheduled once County and local health authorities are sure of vaccine availability from the DPH.** The public is being given notice of planned vaccination clinics for eligible persons in Phase 2.

Appointments (<https://www.cic-health.com/vaccines-location>) may not be immediately available due to overwhelming demand and still-limited supply of vaccine from the manufacturers. **Appointments for local vaccination clinics are only being scheduled once County and local health authorities can be sure of vaccine availability from the DPH.** The public is being given notice of planned vaccination clinics for eligible persons in Phase 2.

Vaccination is available at several **State-run mass vaccination sites** around Massachusetts. The closest ones to Cape Cod are at **Gillette Stadium in Foxboro and in Dartmouth.** Appointments can be scheduled by visiting <https://www.cic-health.com/vaccines-location>, or calling **2-1-1** and following the prompts if the citizen does not have access to/or cannot operate on the internet.

-Plans for 4-5 sub-regional mass vaccination sites on Cape Cod, for operation during Phase 2, are in place. A **Cape Cod Regional Vaccine Consortium** has been established via a partnership between the Barnstable County Health Dept, Local Town Boards of Health (LBOHs), Community Health Centers (CHCs), and Cape Cod Healthcare, and has received support from the DPH. The Consortium has established a **vaccination site at Cape Cod Community College** and is also working with LBOHs and CHC to **organize in-reach to homebound persons** to vaccinate them. **The DPH is responsible for providing sufficient vaccine in order for the Consortium to reach its full potential.**

Harbor Health Services, Inc. (Hyannis) will join the other three Federally Qualified Community Health Centers on Cape Cod in offering **vaccination clinics.**

The State has contracted with **CVS and Walgreens** to arrange vaccination of **older adults in SNFs/congregate care.** **CVS, Walgreens, and Stop & Shop pharmacies** are also scheduling vaccinations for the groups in Phase 2, again depending upon vaccine supply.

The DPH has begun reporting vaccination progress age group and by town. Below is a summary for Barnstable County by age group (**3/17 update in process**)

Massachusetts Department of Public Health COVID-19 Dashboard – Thursday, March 11, 2021										
Individuals with at Least One Dose Administered by County and Age Group, as of 3/9/21										
Source: Data, MA DPH; Analysis, V. Harik, Barnstable County Dept. of Human Services										
Barnstable County	0-19 Years	20-29 Years	30-39 Years	40-49 Years	50-59 Years	60-64 Years	65-69 Years	70-74 Years	75+ Years	Total
Total Population by Age Bracket	36,252	22,041	18,884	19,841	31,497	20,219	20,609	18,355	28,931	216,629
Age Bracket % of County Pop.	17%	10%	9%	9%	15%	9%	10%	8%	13%	
Persons in Age Group with at Least One Dose	96	2,204	3,210	3,968	6,929	5,055	10,511	10,462	23,434	65,870
Percent of Age Group with at Least One Dose	0.26%	10%	17%	20%	22%	25%	51%	57%	81%	30%
Persons in Age Group Not Yet Vaccinated.	36,156	19,837	15,674	15,873	24,568	15,164	10,098	7,893	5,497	150,759
Percent of Age Group Not Yet Vaccinated	99.7%	90%	83%	80%	78%	75%	49%	43%	19%	70%

* Due to privacy concerns, vaccination figures are suppressed where less than 30 persons are vaccinated.

7. COVID Mutation and Changes in Transmissibility/Virulence/Other

The emergence of a variant of the COVID-19 virus in the UK, classified as **B.1.1.7**, was identified in September and publicized in early December. Reports hold that B117 is 50% - 70% more contagious than our predominant variant now circulating (D614G). Within three months of the variant being identified in the UK it became dominant strain circulating there. Additional variants of concern have emerged internationally: **B1351** (South Africa) and Brazil (**P1**) which are also highly transmissible. **An additional variant, B1526, emerged in New York City in November. Its features are being studied.**

All variants appear to be significantly more transmissible than the virus which dominated Wave 1 of the pandemic.

The first three variants are spreading globally and have been detected in the US. The **B117** and **B1351** variants have been identified by the DPH as being in circulation in **MA**.

The **B1526** (NYC) variant now accounts for **40%** of new cases in New York City.

Researchers are working to determine if the variants differ from D614G (the Wave 1 configuration) in terms of: **1.** How sick people become, **2.** If natural immunity is different following infection with D614G, and **3.** If immunity from vaccination differs since the vaccine was developed during the period that D614G has been predominant. **The existing vaccines may be less effective against the new strains. Moderna and Pfizer are working on booster shots to counter these new strains.**

The CDC is posting surveillance information on the emergence of the variants in the US: <https://www.cdc.gov/coronavirus/2019-ncov/transmission/variant-cases.html>.

According to an article by Andrew Joseph from StatNews, "Coronaviruses evolve more slowly than viruses like flu, but they do pick up mutations as they spread. **SARS-CoV-2 has been adding one or two changes a month to its RNA genome since it emerged late last year in China**, and different versions of the virus have been continuously circulating throughout the course of the pandemic. **But this variant (B.1.1.7 or VUI-202012/01) showed up with at least 17 mutations**, according to one genetic analysis."

(Source: https://www.statnews.com/2020/12/21/looming-questions-new-variant-coronavirus/?utm_source=STAT+Newsletters&utm_campaign=1a74bda2ca-MR_COPY_01&utm_medium=email&utm_term=0_8cab1d7961-1a74bda2ca-150158417).

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March 26, 2021

Weekly COVID-19 Case Update

CASES AND STATISTICS

To date there have been a total of 634 cases of COVID-19 in the Town of Harwich. As of today, we are following 44 active cases. A total of 923 individuals have been tested over the last 14 days, with a positivity rate of 5.2%. Harwich has unfortunately been re-designated as a “Red” community.



Massachusetts Department of Public Health COVID-19 Dashboard – Thursday, March 25, 2021

Count and Rate of Confirmed COVID-19 Cases and Tests Performed in MA by City/Town, January 1, 2020 – March 23, 2021

City/Town	Total Case Count	Case Count (Last 14 Days)	Average Daily Incidence Rate per 100,000 (Last 14 days) ¹	Relative Change in Case Counts ²	Total Tests	Total Tests (Last 14 days)	Total Positive Tests (Last 14 days)	Percent Positivity (Last 14 days)	Change in Percent Positivity ³
Hampden	393	14	20.4	Higher	9833	610	14	2.30%	Higher
Hancock	16	0	0	No Change	247	9	0	0%	No Change
Hanover	1189	50	24.8	Higher	24780	1652	56	3.39%	Higher
Hanson	794	43	28.5	Lower	15874	874	48	5.49%	Lower
Hardwick	81	5	10.7	Higher	3565	176	5	2.84%	Higher
Harvard	117	<5	2.1	Lower	8472	469	2	0.43%	Lower
Harwich	634	44	25.0	Higher	17343	923	48	5.20%	Higher
Hatfield	145	6	13.2	Lower	6568	467	8	1.71%	Lower
Haverhill	7326	229	24.8	Higher	134885	6305	270	4.28%	Higher
Hawley	<5	0	0	No Change	115	3	0	0%	No Change
Heath	7	0	0	No Change	669	37	0	0%	No Change
Hingham	1738	81	24.1	Higher	56057	3541	90	2.54%	Lower
Hinsdale	65	6	20.2	Lower	3337	211	8	3.79%	Lower
Holbrook	947	23	14.5	Lower	18309	1007	26	2.58%	Lower
Holden	1339	37	13.9	Lower	38998	2294	40	1.74%	Lower
Holland	115	<5	11.1	Higher	3251	203	5	2.46%	Higher
Holliston	705	37	19.3	Lower	25231	1575	39	2.48%	No Change

Data are current as of 11:59pm on 03/23/2021; For populations <50,000, <5 cases are reported as such or suppressed for confidentiality purposes. ¹ For the calculations used to delineate Grey, Green, Yellow, and Red, please see table on page 25. ² Number of new cases occurring over the current two-week period (3/7/2021 - 3/20/2021) compared to the previous two-week period (2/28/2021 - 3/13/2021). **Higher**=number of new cases in the current two-week period higher than the number of new cases during the last two-week period. **Lower**=number of new cases in the current two-week period lower than number of new cases during the last two-week period. **No change**=number of new cases in current two-week period is equal to the number of new cases during the last two-week period. ³ Change in percent positivity compared to the previous week's (3/18/2021) report. **No Change**= <0.10% difference in the percent positivity. DPH calculates rates per 100,000 population using denominators estimated by the University of Massachusetts Donahue Institute using a modified Hamilton-Perry model (Strate S, et al. Small Area Population Estimates for 2011 through 2020, report, Oct 2016.) As of 11/5/2020, the Massachusetts Department of Public Health is using the 2019 population estimates, the most current available data. **Please note:** Data for these tables are based on information available in the DPH surveillance database at a single point in time. Case counts for specific cities and towns change throughout the day as data cleaning occurs (removal of duplicate reports within the system) and new demographic information (assigning cases to their city or town of residence) is obtained.

VACCINE UPDATE

Age Group	Population	Individuals with at least one dose	Fully vaccinated individuals	Partially vaccinated individuals
0-19 Years	1,993	*	*	*
20-29 Years	1,055	155	87	68
30-49 Years	2,146	576	346	230
50-64 Years	3,012	992	501	491
65-74 Years	2,551	1,824	808	1,016
75+ Years	1,833	1,664	1,344	320
Total	12,589	5,211	3,086	2,125

A total of 3,086 full time Harwich residents are fully vaccinated, and 320 residents have started the vaccination process.

Massachusetts has administered 379,232 doses over the last 7 days, and 3,079,149 total doses. To date, Massachusetts have 1,136,733 fully vaccinated individuals. Barnstable County has received 100,051 doses as of March 23, 2021.

Pre-register to receive a vaccination at <https://www.mass.gov/info-details/preregister-for-a-covid-19-vaccine-appointment>. Currently eligible participants can sign up for a vaccine at <https://vaxfinder.mass.gov/>.

TESTING

For testing options at Outer Cape Health, please call [508-905-2888](tel:508-905-2888) in advance to make a testing appointment.

Testing is available in other locations 7 days per week through Cape Cod Healthcare. Call the Community Testing Line at 508-534-7103 to make an appointment.

REMINDER

Please continue to maintain social distancing, mask use, and good hand hygiene. We need to work together as a community to minimize the spread.

Katie O'Neill
Health Director

3/25/21: Barnstable County and Regional COVID-19 Daily Update

(N.B. I am no longer attempting to tally new probable cases alongside new confirmed cases. I have not received information on probable cases since 12/6/20, at which time Barnstable County had logged a total of 531.)

Good Morning All.

Barnstable County is experiencing a renewed surge in cases and hospitalizations are increasing commensurately. The towns of Barnstable and Yarmouth have returned to the highest risk (red) category in terms of average 2-week new case numbers.

The first case of the Brazilian variant P1 has been announced in Massachusetts in Barnstable County (30 year-old female). **The contribution in Barnstable County to the new case numbers of any variants is unknown at this time.**

In follow up to discussions between the relevant town health agents, the County, and the DPH, **the DPH, with CCHC, has deployed additional testing resources to the mid-Cape region.**

SUMMARY:

1. **New Cases:** DPH new cases reported yesterday:

Barnstable County: 73 new cases (cases continue to increase--mid-Cape sub-region)

Martha's Vineyard:	7 new cases
Nantucket:	13 new cases

2. **Hospitalizations and Fatalities:** 3-day avg. hospitalizations (now 27) has increased from 17 three weeks ago. 5 patients were in the ICUs Tuesday afternoon. There were 5 **COVID fatalities** reported yesterday. CCH and Falmouth Hospital re-opened to limited visitation in early March.

The first week of March marked the **one-year anniversary** of the recognition of the first COVID case in Massachusetts. In year 1 of this pandemic the **Barnstable County Case Fatality Rate (CFR) was 4%**, behind only Berkshire and Franklin Counties (which are also remote, rural locales), and is markedly **higher than the state CFR (2.8%)**.

Recent data on COVID fatalities in Barnstable County suggest that residents of **Long Term Care/Skilled Nursing Facilities/Rest Homes** represent **42.5%** of all fatalities (167 of 393 fatalities, as of 2/23/21). This is a **lower** percentage than that seen during phase 1 of the pandemic last spring (over 65%), and **this percentage continues to fall. Indeed, between 1/5/21 and 2/23/21 only 20% (28) of 137 fatalities occurred among LTC residents.**

3. Schools and Childcare Centers: Due to the mildness of the flu season the DPH has **removed the requirement** that all school children receive a flu vaccination on or before 2/28/21. **School districts remain in a hybrid learning model.** However, **DESE Commissioner Jeffrey Riley has announced plans which will compel schools to return to 100% in-person learning, starting with elementary schools, in April.**

4. Testing; Test Positivity Rates (14-day, as of 3/17/21):

Barnstable County: 5.59% (vs. 3.22%) (**higher** vs. previous fortnight)

Dukes & Nantucket Counties: 2.74% (vs. 1.53%) (**higher**)

A test percent positivity rate below 5% suggests that an outbreak is on the way to **containment**.

5. Weekly Town Risk, and Statewide Cluster Analyses: See charts below.

6. Vaccination:

-Groups eligible for vaccination now are those in Phase 1, and Phase 2 age 60+, K-12 and early education/childcare teachers and staff, and certain workers (formerly termed essential workers; see table below), **depending upon availability of vaccine.**

-**Caregivers** (regardless of age) accompanying a 75+ person to their vaccination appointment remain eligible for vaccination and can receive vaccination under these circumstances at **DPH mass vaccination sites**. Local vaccination clinics may also allow this, but most are not doing so because of constrained vaccine supplies.

-Vaccination at local clinics during Phase 2 are by appointment only and **appointments are announced and able to be scheduled once County and local health authorities are sure of vaccine availability from the DPH**. The public is being given notice of planned vaccination clinics for eligible persons in Phase 2.

-Plans for 4-5 sub-regional mass vaccination sites on Cape Cod, for operation during Phase 2, are in place. **A Cape Cod Regional Vaccine Consortium** has been established via a partnership between the Barnstable County Health Dept, Local Town Boards of Health (LBOHs), Community Health Centers (CHCs), and Cape Cod Healthcare, and has received support from the DPH. The Consortium has established a **vaccination site at Cape Cod Community College** (which opened this week) and is also working with LBOHs and CHC to **organize in-reach to homebound persons** to vaccinate them. **The DPH is responsible for providing sufficient vaccine in order for the Consortium to reach its full potential.**

-**The DPH has begun reporting vaccination progress age group and by town.** Below is a summary table for Barnstable County by age group.

7. COVID Mutation and Changes in Transmissibility/Virulence/Other: **There are four variants of concern: B117 (UK), B1351 (S. Africa), P1 (Brazil), and B1526**

(New York City, which emerged in November). All four appear to be significantly more transmissible than the virus which dominated Wave 1 of the pandemic. Within two months of the B117 variant being identified in the UK (October) it became the dominant strain circulating there. The CDC is now posting surveillance information on the emergence of the B117 variant in the US: <https://www.cdc.gov/coronavirus/2019-ncov/transmission/variant-cases.html>. Existing vaccines may be less effective against these new strains. The degree to which this may be so is being investigated. Moderna and Pfizer are working on a booster shot to counter these new strains.

-B1526 now accounts for 40% of new cases in NYC

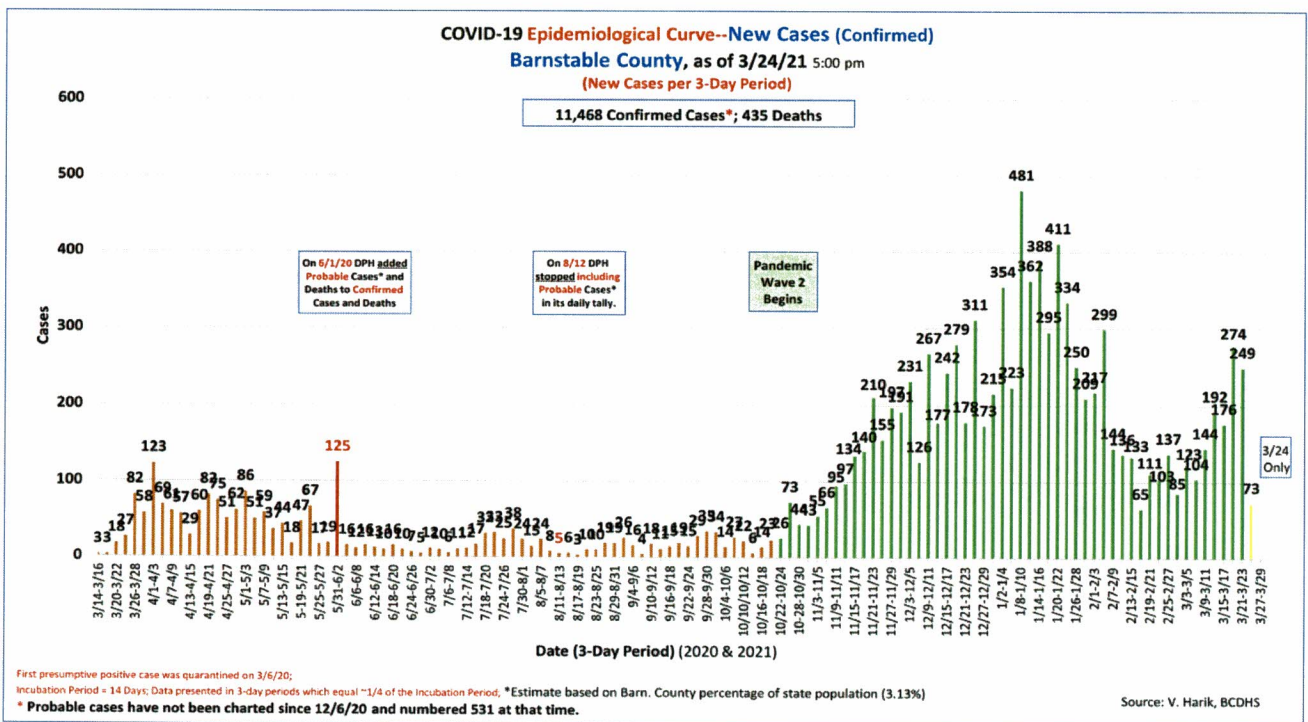
-B117 and B1351 have been identified in Massachusetts.

-The first case with the P1 variant in Barnstable County (and MA) was identified in late February by CDC surveillance processes and announced by the DPH on 3/16.

REPORT DETAIL:

1. New Cases

Daily new case numbers in Barnstable County have moved upward again due to significant case increases in the towns of Barnstable and Yarmouth. 73 cases were reported yesterday. The 7-day average new cases per 100,000 has increased to 40/100K, with Barnstable County acquiring an average of 85 cases per day over the past 7 days.



Nantucket's 7-day average cases per 100,000 population (now 44/100K) is also increasing again. On average (7-day) Nantucket is now picking up 5 new cases per day. 13 cases were reported yesterday.

Martha's Vineyard's 7-day average cases per 100,000 population (17/100K) is increasing as well. On average Dukes County is gaining approximately 3 new cases per day. 7 cases were reported yesterday.

Trailing 14-Day Testing and Cases by County:

In the context of adequate availability of testing and contact tracing, which our three counties appear to have achieved, a test percent positivity rate below 5% suggests that an outbreak is on the way to containment. Rates below 3% and 1% are further important containment milestones.

Test Positivity Rates (14-day, as of 3/17/21):

Barnstable County: 5.59% (vs. 3.22%) (higher vs. previous fortnight)

Dukes & Nantucket Counties: 2.74% (vs. 1.53%) (higher)

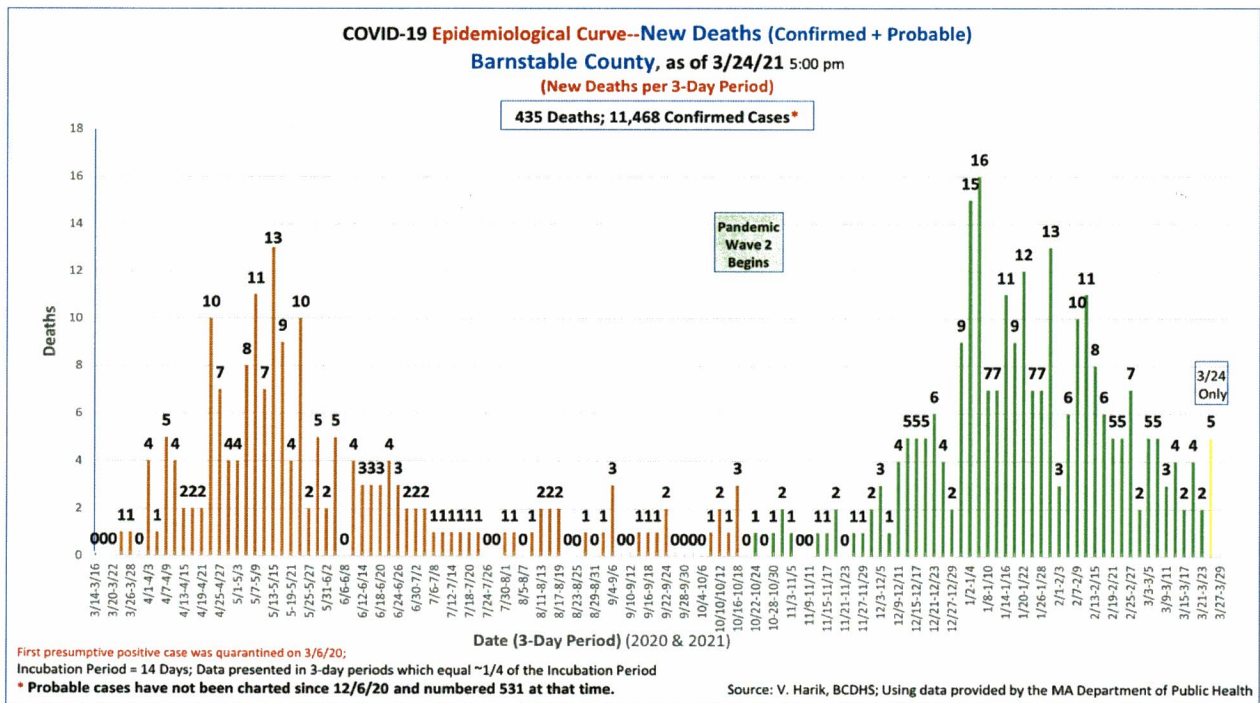
2. Hospitalizations and Fatalities

Hospitalizations and acuity of illness are increasing once more, in train with the case spikes being seen in the mid-Cape region. Cape Cod Hospital and Falmouth Hospital resumed limited visitation of inpatients in early March. The table below shows patient counts for Tuesday 3/23.

Hospitalizations, Last Report:		Not Cumulative		Cumulative		3-Day Avg. of Persons in Hosp. (Med/Surg + ICU)	ICU Percent of Beds Occupied
		Hospital Beds Occupied (Last Report)	ICU Beds Occupied (Last Report)	Barnstable County Cases (Confirmed)	Barnstable County Deaths		
3/23/2021	Cape Cod Hospital	23	4	11,395	430	26.7	16%
	Falmouth Hospital	3	1				
		26	5				

Since DPH reporting of hospitalizations has a 2-day lag Tina Shaw of CCHC is providing me with more recent information (thank you Tina). Tuesday afternoon CCHC reported that there were 31 COVID patients in hospital, 5 of which were in the ICUs.

Fatalities: 5 fatalities was reported yesterday. The total is 435.



Recent data on COVID fatalities in Barnstable County suggest that residents of **Long Term Care/Skilled Nursing Facilities/Rest Homes** represent **42.5%** of all fatalities (167 of 393 fatalities, as of 2/25/21). This is a **lower** percentage than that seen during phase 1 of the pandemic last spring (over 65%), and **this percentage continues to fall. Indeed, between 1/5/21 and 2/23/21 only 20% of the County's 137 fatalities occurred among LTC residents.** I will consolidate and update these data periodically.

This month marks the one-year **anniversary** of the recognition of the first COVID case in Massachusetts. In year 1 of this pandemic the **Barnstable County Case Fatality Rate (CFR) is 4%**, behind only Berkshire and Franklin Counties (which are also remote, rural locales), and is markedly higher than **the state CFR (2.8%)**.

3. Schools and Childcare Centers

School districts are staying vigilant and reacting well to new cases. School districts on the Cape and Islands are in a hybrid learning status, **however DESE Commissioner Jeffrey Riley has announced plans which will compel schools to return to 100% in-person learning, starting with elementary schools, in April.** As such (and noted elsewhere), **school and childcare teachers and staff became eligible for vaccinations on 3/11.**

DESE and the DPH (memo of 1/8/21) announced that they are seeking to introduce COVID-19 screening testing using a pooled strategy in the school setting. Schools may elect to participate by responding to a survey that DESE/DPH have posted. The status of this initiative is unclear at this time.

~~For the 2020-2021 school year the DPH has mandated that all school children be vaccinated for seasonal influenza. This week the DPH extended the deadline for doing so from 12/31/20 to 2/28/21. This mandate has been canceled by the DPH.~~

4. Testing

Additional testing locations in Barnstable County for both symptomatic and asymptomatic persons remain open in **Falmouth** at the Fairgrounds and in **Hyannis** at Cape Cod Hospital (the Melody Tent site has been given over to vaccination clinics). Daily testing capacity is 50 at the Falmouth site and 350 at the Hyannis site. Neither site is open daily and persons must call ahead for an appointment. Details: <https://www.capecodhealth.org/medical-services/infectious-disease/coronavirus/covid-19-testing-process/>.

In late December additional testing by **Outer Cape Community Health Services** began and continues at its 3 locations in Wellfleet, Harwich Port, and Provincetown (<https://outercapc.org/2020/12/23/outer-cape-health-services-to-offer-covid-19-asymptomatic-testing-beginning-december-23/>). The **Community Health Center of Cape Cod** is also offering testing at its locations. These sites may not open be daily and persons must call ahead for an appointment.

Eligibility criteria for the testing include residency in Barnstable County. Testing is done by appointment only. Tests cost \$75, \$110 for travel-related tests, and no one will be turned away if unable to pay for a test.

DPH-mandated **routine testing** in skilled nursing facilities/long term care settings (SNF/LTC) continues. This provides critical surveillance and allows these facilities to stay ahead of asymptomatic spread amongst staff and residents. Routine testing in SNF/LTC settings is conducted weekly for staff.

In addition, the State's **BinaxNOW rapid testing program** (available to **schools**) has been extended to visitors of **nursing homes** and rest home residents (LTC settings) to allow visitation of residents while limiting the risk of infection from visitors. DPH has published guidance on this. The program has also been extended to **homeless shelters** and management of these facilities may apply to the EEC and DPH for testing kits.

5. Weekly Town Risk and Statewide Cluster Analyses

MA DPH Data Dashboard, WEEKLY REPORT of 3/18/21 (for the Period 2/28/21 to 3/13/21)

City/Town	Population	(March 2020 to Present) Total Case Count	Case Count Last 14 Days	Average Daily Incidence Rate per 100K	Relative Change in Case Count	(March 2020 to Present) Total Tests	Total Tests Last 14 Days	Positive Tests Last 14 Days	Percent Positivity Last 14 Days	Change in Percent Positivity
Barnstable	44,773	3,283	283	45.1	Higher	64,532	3,954	296	7.49%	Higher
Bourne	21,026	1,077	44	14.9	Lower	37,211	2,395	56	2.34%	No Change
Brewster	9,926	392	16	11.5	Higher	16,134	799	16	2.00%	Higher
Chatham	5,830	276	16	19.6	No Change	8,042	365	17	4.66%	Higher
Dennis	13,088	601	31	16.9	Higher	16,939	899	32	3.56%	Higher
Eastham	4,603	134	12	18.6	Lower	4,522	261	14	5.36%	Lower
Falmouth	31,190	1,245	50	11.5	Lower	53,504	2,801	60	2.14%	Lower
Harwich	12,589	606	23	13.1	Higher	16,828	850	26	3.06%	Higher
Mashpee	15,535	666	32	14.7	No Change	22,118	1,344	41	3.05%	Higher
Orleans	5,620	260	13	16.5	Higher	6,483	368	15	4.08%	Higher
Provincetown	2,583	69	7	19.4	Higher	4,484	223	8	3.59%	Higher
Sandwich	21,078	945	47	15.9	Lower	26,352	1,691	54	3.19%	Lower
Truro	1,968	39	1	3.6	Higher	1,965	111	1	0.90%	Higher
Wellfleet	2,760	61	5	12.9	Higher	2,895	199	6	3.02%	Higher
Yarmouth	24,062	1,218	89	26.4	Higher	34,340	1,615	95	5.88%	Higher
Barnstable County	216,629	10,872	669	22.1	Higher	316,349	17,875	737	4.12%	Higher
Aquinnah	261	1	0	0	No Change	517	10	0	0%	No Change
Chilmark	759	16	1	9.4	Lower	3,543	139	1	0.72%	Lower
Edgartown	4,086	264	3	5.2	Lower	11,306	552	3	0.54%	Lower
Gosnold	45	5	0	0	No Change	127	2	0	0%	No Change
Oak Bluffs	5,209	236	7	9.6	Lower	7,656	334	9	2.69%	Higher
Tisbury	4,174	265	5	8.6	Lower	14,238	616	5	0.81%	Lower
West Tisbury	2,871	94	1	2.5	Lower	5,051	227	1	0.44%	Lower
Dukes County	17,404	886	18	7.0	Lower	42,438	1,880	19	1.01%	Lower
Nantucket	11,416	1,221	58	36.3	Higher	24,494	1,485	59	3.97%	Higher
Dukes and Nantucket Counties	28,820	2,105	75	18.6	Higher	66,932	3,365	78	2.32%	Higher
State	6,964,383	572,278	19,036	19.5	Lower	17,607,605	1,193,281	21,789	1.83%	No Change

Data Source: MA DPH, 3/18/21 Weekly COVID Report (<https://www.mass.gov/info-details/covid-19-response-reporting>); Analysis: V. Harik BCDHS.

Massachusetts COVID Testing Rates, As Applied to Barnstable County (Thru 3/13/21)

Sources: Census.gov; MA DPH Weekly COVID Report, 3/18/21. Analysis: V. Harik, BCDHS

	MA	Barnstable County
Population Estimate (via DPH)	6,964,383	216,629
Barnstable County % of MA Pop.		3.11%
Barn. County % of Total MA Tests		1.80%
Barn. County % of MA Tests, Past Two Weeks		1.50%
Barn. County % of MA Total Confirmed Cases		1.90%
Barn. County % of MA Confirmed Cases, Past Two Weeks		3.51%
MA % Positive Tests Last 14 Days		1.83%
Barnstable County % Positive Tests Last 14 Days		4.12%

Active COVID Clusters by Exposure Setting Type for the Period 2/14/21 to 3/13/21 (as of 3/18/21)									
Source: https://www.mass.gov/info-details/covid-19-response-reporting . Tabulation: V. Harik, Barnstable County DHS									
Sorted by Number of Cases in New Cluster Settings									
Exposure Setting	New Clusters (Identified 2/14/21 – 3/13/21)			Ongoing Clusters (Cluster Identified Prior to 2/14/21 But Not Meeting Criteria for Closing)			Total		
	Clusters	Confirmed Cases	Close Contacts	Clusters	Confirmed Cases	Close Contacts	Clusters	Confirmed Cases	Close Contacts
1 Household	6,148	15,670	0	17,174	2,426	0	23,322	18,096	0
2 Child Care	72	245	240	219	162	162	291	407	402
3 Colleges & Universities	31	224	89	59	65	51	90	289	140
4 Long Term Care Facilities	25	91	0	121	248	0	146	339	0
5 K-12 Schools	15	74	82	36	3	45	51	77	127
6 Organized Athletics/Camps	14	66	174	59	14	85	73	80	259
7 Restaurants & Food Courts	15	63	21	27	8	4	42	71	25
8 Industrial Settings	11	57	6	41	54	55	52	111	61
9 Social Gatherings	9	52	39	13	7	13	22	59	52
10 Retail & Services	9	40	2	42	25	8	51	65	10

6. Vaccination

Groups eligible for vaccination now are those in Phase 1, and Phase 2 age 60+, K-12 and early education/childcare teachers and staff, and certain workers (formerly termed essential workers; see table below), **depending upon availability of vaccine.**

Caregivers (regardless of age) **accompanying a 75+ person to their vaccination appointment** remain eligible for vaccination and can receive vaccination under these circumstances at DPH mass vaccination sites. Local vaccination clinics may also allow this, but most are not doing so because of constrained vaccine supplies.

The DPH has released the timeline by which all remaining groups will become eligible for vaccination:

Timeline for remaining groups:

March 22nd : Residents 60+ and certain workers (see <https://www.mass.gov/info-details/covid-19-vaccinations-for-certain-workers>)

April 5th : Residents 55+ and residents with one certain medical condition

April 19th: General public ages 16 years of age and older

The following workers become eligible for vaccination on March 22, 2021:

Worker category	Definition / examples (if applicable)
Restaurant or cafe workers	Cooks, servers, maintenance staff, managers, cashiers
Food, meatpacking, beverage, agriculture, consumer goods, retail, or food service workers	All staff involved in the production, processing, storage, transport, wholesale and retail sale, preparation, and service of food and consumer goods, including farm and other agricultural workers, including farm stand and nurseries
Grocery and convenience store workers	Cashiers, baggers, stockers, managers, maintenance staff, security staff
Food pantry workers or volunteers	
Medical supply chain workers	Workers directly involved in the manufacturing and production, packaging, transport, quality control, and sale of materials critical to the delivery of medical care
Vaccine development workers	Workers directly involved in research, development, manufacturing and production, packaging, transport, quality control, and sale of vaccines (COVID-19 and others)
Transit/transportation workers	Drivers/operators, attendants, sales, administrators, maintenance staff, public and private bus, train/subway, passenger boat/ferries, passenger air, and automobile (including rental car, car service/limousine, taxi, and ride apps) transportation, bridge and road construction and maintenance workers, shipping port and terminal workers, commercial transportation
Public works, water, wastewater, or utility workers	Utility: Electrical generation and supply system, natural gas delivery, nuclear power plant, water supply, telephone, cable/fiber optical/broadband/cellular service workers Public works including street repair, street lighting, public park, beach, and trail maintenance workers.
Sanitation workers	Drivers, solid waste handlers, recycling staff, street cleaners, sewer and storm water system workers
Public health workers	Public-facing federal, state, and local governmental public health workers
Court system worker (judges, prosecutors, defense attorneys, clerks), other than court officers who are listed under first responders	Criminal court workers, including judges, prosecutors, public defenders, private defense attorneys, clerks, maintenance workers
Funeral directors and funeral workers	Funeral directors/morticians, other funeral workers (funeral home staff, drivers, maintenance workers, cemetery workers, funeral cosmetology workers)

Vaccination at local clinics during Phase 2 is by appointment only and **appointments are announced and able to be scheduled once County and local health authorities are sure of vaccine availability from the DPH.** The public is being given notice of planned vaccination clinics for eligible persons in Phase 2.

Appointments (<https://www.cic-health.com/vaccines-location>) may not be immediately available due to overwhelming demand and still-limited supply of vaccine from the manufacturers. **Appointments for local vaccination clinics are only being scheduled once County and local health authorities can be sure of vaccine availability from the DPH.** The public is being given notice of planned vaccination clinics for eligible persons in Phase 2.

Vaccination is available at several **State-run mass vaccination sites** around Massachusetts. The closest ones to Cape Cod are at **Gillette Stadium in Foxboro and in Dartmouth.** Appointments can be scheduled by visiting <https://www.cic-health.com/vaccines-location>, or calling **2-1-1** and following the prompts if the citizen does not have access to/or cannot operate on the internet.

-Plans for 4-5 sub-regional mass vaccination sites on Cape Cod, for operation during Phase 2, are in place. A **Cape Cod Regional Vaccine Consortium** has been established via a partnership between the Barnstable County Health Dept, Local Town Boards of Health (LBOHs), Community Health Centers (CHCs), and Cape Cod Healthcare, and has received support from the DPH. The Consortium has established a **vaccination site at Cape Cod Community College** and is also working with LBOHs and CHC to **organize in-reach to homebound persons** to vaccinate them. **The DPH is responsible for providing sufficient vaccine in order for the Consortium to reach its full potential.**

Harbor Health Services, Inc. (Hyannis) will join the other three Federally Qualified Community Health Centers on Cape Cod in offering **vaccination clinics.**

The State has contracted with **CVS and Walgreens** to arrange vaccination of **older adults in SNFs/congregate care.** **CVS, Walgreens, and Stop & Shop pharmacies** are also scheduling vaccinations for the groups in Phase 2, again depending upon vaccine supply.

The DPH is providing weekly reports of vaccination progress age group and by town. I will consolidate and update these data periodically.

Massachusetts Department of Public Health COVID-19 Dashboard – Thursday, March 11, 2021

Individuals with at Least One Dose Administered by County and Age Group, as of 3/9/21

Source: Data, MA DPH; Analysis, V. Harik, Barnstable County Dept. of Human Services

Barnstable County	0-19 Years	20-29 Years	30-39 Years	40-49 Years	50-59 Years	60-64 Years	65-69 Years	70-74 Years	75+ Years	Total
Total Population by Age Bracket	36,252	22,041	18,884	19,841	31,497	20,219	20,609	18,355	28,931	216,629
Age Bracket % of County Pop.	17%	10%	9%	9%	15%	9%	10%	8%	13%	
Persons in Age Group with at Least One Dose	96	2,204	3,210	3,968	6,929	5,055	10,511	10,462	23,434	65,870
Percent of Age Group with at Least One Dose	0.26%	10%	17%	20%	22%	25%	51%	57%	81%	30%
Persons in Age Group Not Yet Vaccinated.	36,156	19,837	15,674	15,873	24,568	15,164	10,098	7,893	5,497	150,759
Percent of Age Group Not Yet Vaccinated	99.7%	90%	83%	80%	78%	75%	49%	43%	19%	70%

* Due to privacy concerns, vaccination figures are suppressed where less than 30 persons are vaccinated.

7. COVID Mutation and Changes in Transmissibility/Virulence/Other

The emergence of a variant of the COVID-19 virus in the UK, classified as B.1.1.7, was identified in September and publicized in early December. Reports hold that B117 is 50% - 70% more contagious than our predominant variant now circulating (D614G). Within three months of the variant being identified in the UK it became dominant strain circulating there. Additional variants of concern have emerged internationally: B1351 (South Africa) and Brazil (P1) which are also highly transmissible. An additional variant, B1526, emerged in New York City in November. Its features are being studied.

All variants appear to be significantly more transmissible than the virus which dominated Wave 1 of the pandemic.

The first three variants are spreading globally and have been detected in the US. The B1526 (NYC) variant now accounts for 40% of new cases in New York City. The B117, B1351, and P1 variants have been identified by the DPH as being in circulation in MA. The first case with the P1 variant in Barnstable County (and MA) was identified in late February by CDC surveillance processes and announced by the DPH on 3/16.

Researchers are working to determine if the variants differ from D614G (the Wave 1 configuration) in terms of: 1. How sick people become, 2. If natural immunity is different following infection with D614G, and 3. If immunity from vaccination differs since the vaccine was developed during the period that D614G has been predominant. The existing vaccines may be less effective against the new strains. Moderna and Pfizer are working on booster shots to counter these new strains.

The CDC is posting surveillance information on the emergence of the variants in the US: <https://www.cdc.gov/coronavirus/2019-ncov/transmission/variant-cases.html>.

Vaira Harik, M.S.
Deputy Director
Barnstable County Dept. of Human Services
Cell: 520-271-6314
Email: vharik@barnstablecounty.org

3/24/21: Barnstable County and Regional COVID-19 Daily Update

(N.B. I am no longer attempting to tally new probable cases alongside new confirmed cases. I have not received information on probable cases since 12/6/20, at which time Barnstable County had logged a total of 531.)

Good Morning All.

Barnstable County is experiencing a renewed surge in cases and hospitalizations are increasing commensurately. The towns of Barnstable and Yarmouth have returned to the highest risk (red) category in terms of average 2-week new case numbers.

The first case of the Brazilian variant P1 has been announced in Massachusetts in Barnstable County (30 year-old female). **The contribution in Barnstable County to the new case numbers of any variants is unknown at this time.**

In follow up to discussions between the relevant town health agents, the County, and the DPH, **the DPH, with CCHC, has deployed additional testing resources to the mid-Cape region.**

SUMMARY:

1. **New Cases:** DPH new cases reported yesterday:

Barnstable County: 94 new cases (cases continue to increase--mid-Cape sub-region)

Martha's Vineyard:	2 new cases
Nantucket:	2 new cases

2. **Hospitalizations and Fatalities:** 3-day avg. hospitalizations (now 27) has increased from 17 three weeks ago. 5 patients were in the ICUs yesterday afternoon. There were 2 **COVID fatalities** reported Friday-Sunday and 1 more was reported yesterday. CCH and Falmouth Hospital re-opened to limited visitation in early March.

The first week of March marked the **one-year anniversary** of the recognition of the first COVID case in Massachusetts. In year 1 of this pandemic the **Barnstable County Case**

Fatality Rate (CFR) was 4%, behind only Berkshire and Franklin Counties (which are also remote, rural locales), and is markedly **higher than the state CFR (2.8%)**.

Recent data on COVID fatalities in Barnstable County suggest that residents of **Long Term Care/Skilled Nursing Facilities/Rest Homes** represent **42.5%** of all fatalities (167 of 393 fatalities, as of 2/23/21). This is a **lower** percentage than that seen during phase 1 of the pandemic last spring (over 65%), and **this percentage continues to fall. Indeed, between 1/5/21 and 2/23/21 only 20% (28) of 137 fatalities occurred among LTC residents.**

3. Schools and Childcare Centers: Due to the mildness of the flu season the DPH has **removed the requirement** that all school children receive a flu vaccination on or before 2/28/21. **School districts remain in a hybrid learning model.** However, **DESE Commissioner Jeffrey Riley has announced plans which will compel schools to return to 100% in-person learning, starting with elementary schools, in April.**

4. Testing; Test Positivity Rates (14-day, as of 3/17/21):

Barnstable County: 4.12% (vs. 3.22%) (**higher** vs. previous fortnight)

Dukes & Nantucket Counties: 2.32% (vs. 1.53%) (**higher**)

A test percent positivity rate below 5% suggests that an outbreak is on the way to **containment**.

5. Weekly Town Risk, and Statewide Cluster Analyses: See charts below.

6. Vaccination:

-Groups eligible for vaccination now are those in Phase 1, and Phase 2 age 60+, K-12 and early education/childcare teachers and staff, and certain workers (formerly termed essential workers; see table below), **depending upon availability of vaccine.**

-**Caregivers** (regardless of age) accompanying a 75+ person to their vaccination appointment remain eligible for vaccination and can receive vaccination under these circumstances at **DPH mass vaccination sites**. Local vaccination clinics may also allow this, but most are not doing so because of constrained vaccine supplies.

-Vaccination at local clinics during Phase 2 are by appointment only and **appointments are announced and able to be scheduled once County and local health authorities are sure of vaccine availability from the DPH.** The public is being given notice of planned vaccination clinics for eligible persons in Phase 2.

-Plans for 4-5 sub-regional mass vaccination sites on Cape Cod, for operation during Phase 2, are in place. **A Cape Cod Regional Vaccine Consortium** has been established via a partnership between the Barnstable County Health Dept, Local Town Boards of Health (LBOHs), Community Health Centers (CHCs), and Cape Cod Healthcare, and has received support from the DPH. The Consortium has established a **vaccination site at Cape Cod Community College** (which opened this week) and is also working with LBOHs and CHC to **organize in-reach to homebound persons** to vaccinate them. **The**

DPH is responsible for providing sufficient vaccine in order for the Consortium to reach its full potential.

-The DPH has begun reporting vaccination progress age group and by town.
Below is a summary table for Barnstable County by age group.

7. **COVID Mutation and Changes in Transmissibility/Virulence/Other: There are four variants of concern: B117 (UK), B1351 (S. Africa), P1 (Brazil), and B1526 (New York City, which emerged in November).** All four appear to be significantly more transmissible than the virus which dominated Wave 1 of the pandemic. Within two months of the B117 variant being identified in the UK (October) it became the dominant strain circulating there. The CDC is now posting surveillance information on the emergence of the B117 variant in the US: <https://www.cdc.gov/coronavirus/2019-ncov/transmission/variant-cases.html>. Existing vaccines may be less effective against these new strains. The degree to which this may be so is being investigated. Moderna and Pfizer are working on a booster shot to counter these new strains.

-B1526 now accounts for 40% of new cases in NYC

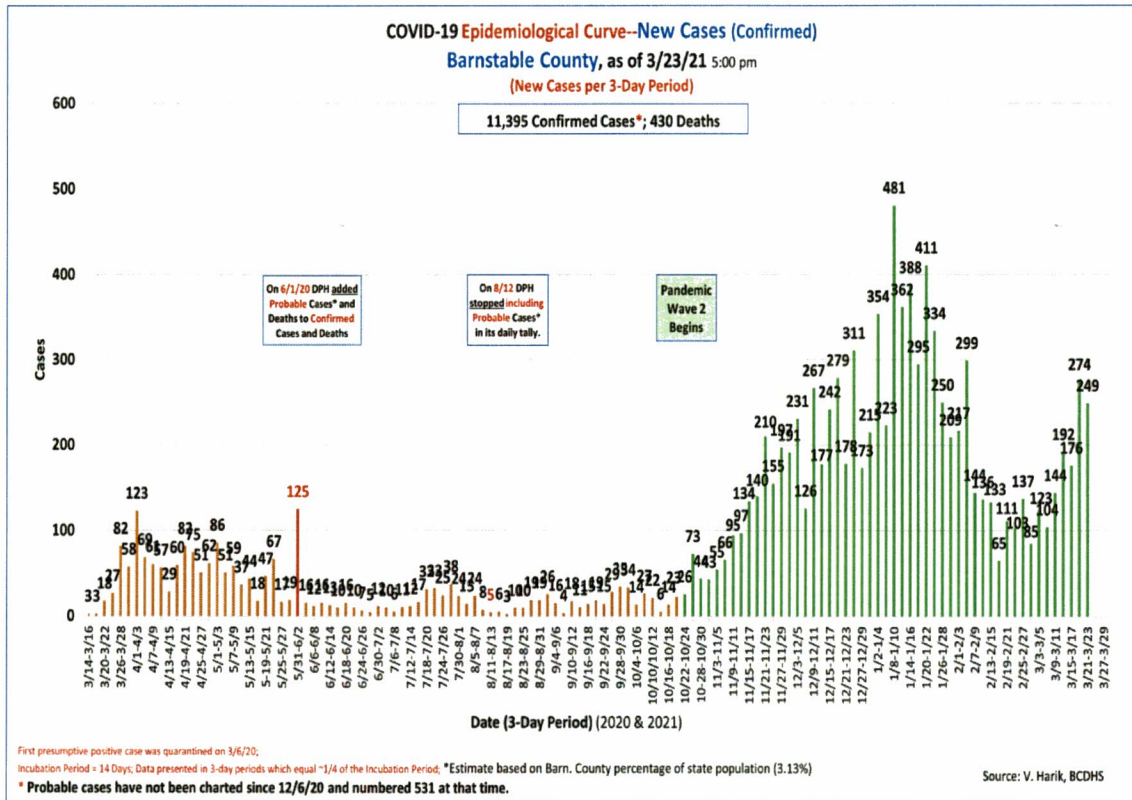
-B117 and B1351 have been identified in Massachusetts.

-The first case with the P1 variant in Barnstable County (and MA) was identified in late February by CDC surveillance processes and announced by the DPH on 3/16.

REPORT DETAIL:

1. New Cases

Daily new case numbers in Barnstable County have moved upward again due to **significant case increases in the towns of Barnstable and Yarmouth. 94 cases** were reported yesterday. The 7-day average new cases per 100,000 has increased to 39/100K, with Barnstable County acquiring an average of 84 cases per day over the past 7 days.



Nantucket's 7-day average cases per 100,000 population (now 31/100K) has dropped since last week but remains high. On average (7-day) Nantucket is now picking up 4 new cases per day. 2 cases were reported yesterday.

Martha's Vineyard's 7-day average cases per 100,000 population (12/100K) remains low. On average Dukes County is gaining approximately 2 new cases per day. 2 cases were reported yesterday.

Trailing 14-Day Testing and Cases by County:

In the context of adequate availability of testing and contact tracing, which our three counties appear to have achieved, a test percent positivity rate below 5% suggests that an outbreak is on the way to containment. Rates below 3% and 1% are further important containment milestones.

Test Positivity Rates (14-day, as of 3/17/21):

Barnstable County: 4.12% (vs. 3.22%) (higher vs. previous fortnight)

Dukes & Nantucket Counties: 2.32% (vs. 1.53%) (higher)

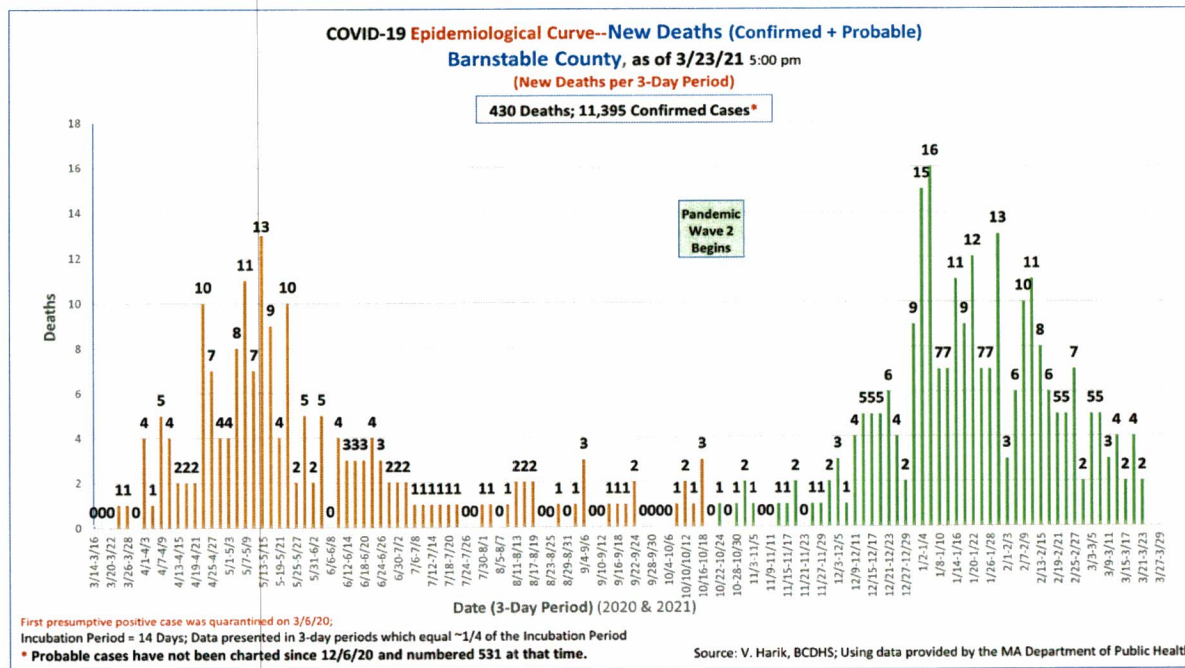
2. Hospitalizations and Fatalities

Hospitalizations and acuity of illness are increasing once more, in train with the case spikes being seen in the mid-Cape region. Cape Cod Hospital and Falmouth Hospital resumed **limited visitation** of inpatients in early March.

Hospitalizations, Last Report:		Not Cumulative		Cumulative		3-Day Avg. of Persons in Hosp. (Med/Surg + ICU)	ICU Percent of Beds Occupied
		Hospital Beds Occupied (Last Report)	ICU Beds Occupied (Last Report)	Barnstable County Cases (Confirmed)	Barnstable County Deaths		
3/23/2021	Cape Cod Hospital	23	4	11,395	430	26.7	16%
	Falmouth Hospital	3	1				
		26	5				

Since DPH reporting of hospitalizations has a 2-day lag Tina Shaw of CCHC is providing me with more recent information (thank you Tina). Yesterday afternoon CCHC reported that there were **31 COVID patients in hospital**, 5 of which were in the ICUs.

Fatalities: 1 fatality was reported yesterday. The total is **430**.



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School districts are staying vigilant and reacting well to new cases. School districts on the Cape and Islands are in a hybrid learning status, **however DESE Commissioner Jeffrey Riley has announced plans which will compel schools to return to 100% in-person learning, starting with elementary schools, in April. As such (and noted elsewhere), school and childcare teachers and staff became eligible for vaccinations on 3/11.**

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Data Source: MA DPH, 3/18/21 Weekly COVID Report (<https://www.mass.gov/info-details/covid-19-response-reporting>); Analysis: V. Harik, BCDHS.

Massachusetts COVID Testing Rates, As Applied to Barnstable County (Thru 3/13/21)

Sources: Census.gov; MA DPH Weekly COVID Report, 3/18/21. Analysis: V. Harik, BCDHS

	MA	Barnstable County
Population Estimate (via DPH)	6,964,383	216,629
Barnstable County % of MA Pop.		3.11%
Barn. County % of Total MA Tests		1.80%
Barn. County % of MA Tests, Past Two Weeks		1.50%
Barn. County % of MA Total Confirmed Cases		1.90%
Barn. County % of MA Confirmed Cases, Past Two Weeks		3.51%
MA % Positive Tests Last 14 Days		1.83%
Barnstable County % Positive Tests Last 14 Days		4.12%

Active COVID Clusters by Exposure Setting Type for the Period 2/14/21 to 3/13/21 (as of 3/18/21)									
Source: https://www.mass.gov/info-details/covid-19-response-reporting . Tabulation: V. Harik, Barnstable County DHS									
Sorted by Number of Cases in New Cluster Settings									
Exposure Setting	New Clusters (Identified 2/14/21 – 3/13/21)			Ongoing Clusters (Cluster Identified Prior to 2/14/21 But Not Meeting Criteria for Closing)			Total		
	Clusters	Confirmed Cases	Close Contacts	Clusters	Confirmed Cases	Close Contacts	Clusters	Confirmed Cases	Close Contacts
1 Household	6,148	15,670	0	17,174	2,426	0	23,322	18,096	0
2 Child Care	72	245	240	219	162	162	291	407	402
3 Colleges & Universities	31	224	89	59	65	51	90	289	140
4 Long Term Care Facilities	25	91	0	121	248	0	146	339	0
5 K-12 Schools	15	74	82	36	3	45	51	77	127
6 Organized Athletics/Camps	14	66	174	59	14	85	73	80	259
7 Restaurants & Food Courts	15	63	21	27	8	4	42	71	25
8 Industrial Settings	11	57	6	41	54	55	52	111	61
9 Social Gatherings	9	52	39	13	7	13	22	59	52
10 Retail & Services	9	40	2	42	25	8	51	65	10

6. Vaccination

Groups eligible for vaccination now are those in Phase 1, and Phase 2 age 60+, K-12 and early education/childcare teachers and staff, and certain workers (formerly termed essential workers; see table below), **depending upon availability of vaccine.**

Caregivers (regardless of age) **accompanying a 75+ person to their vaccination appointment** remain eligible for vaccination and can receive vaccination under these circumstances at DPH mass vaccination sites. Local vaccination clinics may also allow this, but most are not doing so because of constrained vaccine supplies.

The DPH has released the timeline by which all remaining groups will become eligible for vaccination:

Timeline for remaining groups:

March 22nd : Residents 60+ and certain workers (see <https://www.mass.gov/info-details/covid-19-vaccinations-for-certain-workers>)

April 5th : Residents 55+ and residents with one certain medical condition

April 19th: General public ages 16 years of age and older

The following workers become eligible for vaccination on March 22, 2021:

Worker category	Definition / examples (if applicable)
Restaurant or cafe workers	Cooks, servers, maintenance staff, managers, cashiers
Food, meatpacking, beverage, agriculture, consumer goods, retail, or food service workers	All staff involved in the production, processing, storage, transport, wholesale and retail sale, preparation, and service of food and consumer goods, including farm and other agricultural workers, including farm stand and nurseries
Grocery and convenience store workers	Cashiers, baggers, stockers, managers, maintenance staff, security staff
Food pantry workers or volunteers	
Medical supply chain workers	Workers directly involved in the manufacturing and production, packaging, transport, quality control, and sale of materials critical to the delivery of medical care
Vaccine development workers	Workers directly involved in research, development, manufacturing and production, packaging, transport, quality control, and sale of vaccines (COVID-19 and others)
Transit/transportation workers	Drivers/operators, attendants, sales, administrators, maintenance staff, public and private bus, train/subway, passenger boat/ferries, passenger air, and automobile (including rental car, car service/limousine, taxi, and ride apps) transportation, bridge and road construction and maintenance workers, shipping port and terminal workers, commercial transportation
Public works, water, wastewater, or utility workers	Utility: Electrical generation and supply system, natural gas delivery, nuclear power plant, water supply, telephone, cable/fiber optical/broadband/cellular service workers Public works including street repair, street lighting, public park, beach, and trail maintenance workers.
Sanitation workers	Drivers, solid waste handlers, recycling staff, street cleaners, sewer and storm water system workers
Public health workers	Public-facing federal, state, and local governmental public health workers
Court system worker (judges, prosecutors, defense attorneys, clerks), other than court officers who are listed under first responders	Criminal court workers, including judges, prosecutors, public defenders, private defense attorneys, clerks, maintenance workers
Funeral directors and funeral workers	Funeral directors/morticians, other funeral workers (funeral home staff, drivers, maintenance workers, cemetery workers, funeral cosmetology workers)

Vaccination at local clinics during Phase 2 is by appointment only and **appointments are announced and able to be scheduled once County and local health authorities are sure of vaccine availability from the DPH.** The public is being given notice of planned vaccination clinics for eligible persons in Phase 2.

Appointments (<https://www.cic-health.com/vaccines-location>) may not be immediately available due to overwhelming demand and still-limited supply of vaccine from the manufacturers. **Appointments for local vaccination clinics are only being scheduled once County and local health authorities can be sure of vaccine availability from the DPH.** The public is being given notice of planned vaccination clinics for eligible persons in Phase 2.

Vaccination is available at several **State-run mass vaccination sites** around Massachusetts. The closest ones to Cape Cod are at **Gillette Stadium in Foxboro and in Dartmouth.** Appointments can be scheduled by visiting <https://www.cic-health.com/vaccines-location>, or calling **2-1-1** and following the prompts if the citizen does not have access to/or cannot operate on the internet.

-Plans for 4-5 sub-regional mass vaccination sites on Cape Cod, for operation during Phase 2, are in place. A **Cape Cod Regional Vaccine Consortium** has been established via a partnership between the Barnstable County Health Dept, Local Town Boards of Health (LBOHs), Community Health Centers (CHCs), and Cape Cod Healthcare, and has received support from the DPH. The Consortium has established a **vaccination site at Cape Cod Community College** and is also working with LBOHs and CHC to **organize in-reach to homebound persons** to vaccinate them. **The DPH is responsible for providing sufficient vaccine in order for the Consortium to reach its full potential.**

Harbor Health Services, Inc. (Hyannis) will join the other three Federally Qualified Community Health Centers on Cape Cod in offering **vaccination clinics.**

The State has contracted with **CVS and Walgreens** to arrange vaccination of **older adults in SNFs/congregate care.** **CVS, Walgreens, and Stop & Shop pharmacies** are also scheduling vaccinations for the groups in Phase 2, again depending upon vaccine supply.

The DPH is providing weekly reports of vaccination progress age group and by town. I will consolidate and update these data periodically.

Massachusetts Department of Public Health COVID-19 Dashboard – Thursday, March 11, 2021

Individuals with at Least One Dose Administered by County and Age Group, as of 3/9/21

Source: Data, MA DPH; Analysis, V. Harik, Barnstable County Dept. of Human Services

Barnstable County	0-19 Years	20-29 Years	30-39 Years	40-49 Years	50-59 Years	60-64 Years	65-69 Years	70-74 Years	75+ Years	Total
Total Population by Age Bracket	36,252	22,041	18,884	19,841	31,497	20,219	20,609	18,355	28,931	216,629
Age Bracket % of County Pop.	17%	10%	9%	9%	15%	9%	10%	8%	13%	
Persons in Age Group with at Least One Dose	96	2,204	3,210	3,968	6,929	5,055	10,511	10,462	23,434	65,870
Percent of Age Group with at Least One Dose	0.26%	10%	17%	20%	22%	25%	51%	57%	81%	30%
Persons in Age Group Not Yet Vaccinated.	36,156	19,837	15,674	15,873	24,568	15,164	10,098	7,893	5,497	150,759
Percent of Age Group Not Yet Vaccinated	99.7%	90%	83%	80%	78%	75%	49%	43%	19%	70%

* Due to privacy concerns, vaccination figures are suppressed where less than 30 persons are vaccinated.

7. COVID Mutation and Changes in Transmissibility/Virulence/Other

The emergence of a variant of the COVID-19 virus in the UK, classified as B.1.1.7, was identified in September and publicized in early December. Reports hold that B117 is 50% - 70% more contagious than our predominant variant now circulating (D614G). Within three months of the variant being identified in the UK it became dominant strain circulating there. Additional variants of concern have emerged internationally: B1351 (South Africa) and Brazil (P1) which are also highly transmissible. An additional variant, B1526, emerged in New York City in November. Its features are being studied.

All variants appear to be significantly more transmissible than the virus which dominated Wave 1 of the pandemic.

The first three variants are spreading globally and have been detected in the US. The B1526 (NYC) variant now accounts for 40% of new cases in New York City. The B117, B1351, and P1 variants have been identified by the DPH as being in circulation in MA. The first case with the P1 variant in Barnstable County (and MA) was identified in late February by CDC surveillance processes and announced by the DPH on 3/16.

Researchers are working to determine if the variants differ from D614G (the Wave 1 configuration) in terms of: 1. How sick people become, 2. If natural immunity is different following infection with D614G, and 3. If immunity from vaccination differs since the vaccine was developed during the period that D614G has been predominant. The existing vaccines may be less effective against the new strains. Moderna and Pfizer are working on booster shots to counter these new strains.

The CDC is posting surveillance information on the emergence of the variants in the US: <https://www.cdc.gov/coronavirus/2019-ncov/transmission/variant-cases.html>.

Vaira Harik, M.S.
Deputy Director
Barnstable County Dept. of Human Services
Cell: 520-271-6314
Email: vharik@barnstablecounty.org

3/22/21: Barnstable County and Regional COVID-19 Daily Update

(N.B. I am no longer attempting to tally new probable cases alongside new confirmed cases. I have not received information on probable cases since 12/6/20, at which time Barnstable County had logged a total of 531.)

Good Morning All.

The towns of Barnstable and Yarmouth have returned to the highest risk (red) category in terms of average 2-week new case numbers.

The first case of the Brazilian variant P1 has been announced in Massachusetts in Barnstable County (30 year-old female). The contribution in Barnstable County to the new case numbers of any variants is unknown at this time.

In follow up to discussions between the relevant town health agents, the County, and the DPH, the DPH has stated that it will deploy additional testing resources to the mid-Cape region.

SUMMARY:

1. **New Cases:** DPH new cases reported yesterday:

Barnstable County: 57 new cases (cases continue to increase--mid-Cape sub-region)

Martha's Vineyard:	1 new case
Nantucket:	4 new cases

2. **Hospitalizations and Fatalities:** 3-day avg. hospitalizations (now **23**) has increased. 5 patients were in the ICU yesterday afternoon. There were **2 COVID fatalities** reported Friday-Sunday. CCH and Falmouth Hospital have re-opened to limited visitation.

The first week of March marked the **one-year anniversary** of the recognition of the first COVID case in Massachusetts. In year 1 of this pandemic the **Barnstable County Case**

Fatality Rate (CFR) is 4%, behind only Berkshire and Franklin Counties (which are also remote, rural locales), and is markedly higher than the **state CFR (2.8%)**.

Recent data on COVID fatalities in Barnstable County suggest that residents of **Long Term Care/Skilled Nursing Facilities/Rest Homes** represent **42.5%** of all fatalities (167 of 393 fatalities, as of 2/23/21). This is a **lower** percentage than that seen during phase 1 of the pandemic last spring (over 65%), and **this percentage continues to fall**. **Indeed, between 1/5/21 and 2/23/21 only 20% (28) of 137 fatalities occurred among LTC residents.**

3. Schools and Childcare Centers: Due to the mildness of the flu season the DPH has **removed the requirement** that all school children receive a flu vaccination on or before 2/28/21. **School districts remain in a hybrid learning model**. However, **DESE Commissioner Jeffrey Riley has announced plans which will compel schools to return to 100% in-person learning, starting with elementary schools, in April.**

4. Testing; Test Positivity Rates (14-day, as of 3/17/21):

Barnstable County: **4.12%** (vs. 3.22%) (**higher** vs. previous fortnight)

Dukes & Nantucket Counties: **2.32%** (vs. 1.53%) (**higher**)

A test percent positivity rate below 5% suggests that an outbreak is on the way to **containment**.

5. Weekly Town Risk, and Statewide Cluster Analyses: See charts below.

6. Vaccination:

-Groups eligible for vaccination now are those in Phase 1, and Phase 2 age 60+, K-12 and early education/childcare teachers and staff, and certain workers (formerly termed essential workers; see table below), **depending upon availability of vaccine.**

-**Caregivers** (regardless of age) accompanying a 75+ person to their vaccination appointment remain eligible for vaccination and can receive vaccination under these circumstances at **DPH mass vaccination sites**. Local vaccination clinics may also allow this, but most are not doing so because of constrained vaccine supplies.

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LBOHs and CHC to **organize in-reach to homebound persons** to vaccinate them. **The DPH is responsible for providing sufficient vaccine in order for the Consortium to reach its full potential.**

-The DPH has begun reporting vaccination progress age group and by town. Below is a summary table for Barnstable County by age group.

7. **COVID Mutation and Changes in Transmissibility/Virulence/Other: There are four variants of concern: B117 (UK), B1351 (S. Africa), P1 (Brazil), and B1526 (New York City, which emerged in November).** All four appear to be significantly more transmissible than the virus which dominated Wave 1 of the pandemic. Within two months of the B117 variant being identified in the UK (October) it became the dominant strain circulating there. The CDC is now posting surveillance information on the emergence of the B117 variant in the US: <https://www.cdc.gov/coronavirus/2019-ncov/transmission/variant-cases.html>. Existing vaccines may be less effective against these new strains. The degree to which this may be so is being investigated. Moderna and Pfizer are working on a booster shot to counter these new strains.

-B1526 now accounts for 40% of new cases in NYC

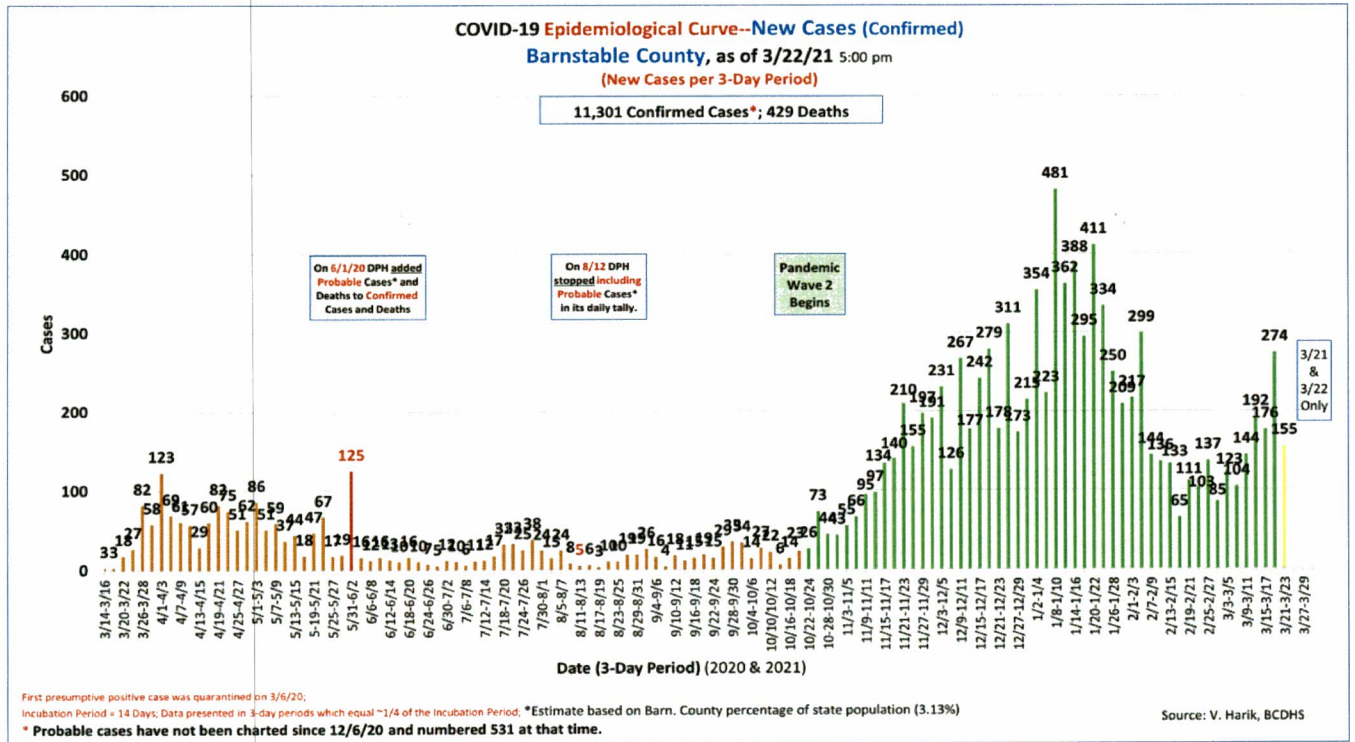
-B117 and B1351 have been identified in Massachusetts.

-The first case of the Brazilian variant P1 has been announced in Massachusetts in Barnstable County.

REPORT DETAIL:

1. New Cases

Daily new case numbers in Barnstable County have moved upward again due to **significant case increases in the towns of Barnstable and Yarmouth. 290 cases** were reported over the weekend (Friday to Sunday, inclusive), nearly 100 more than were reported over the prior weekend. The 7-day average new cases per 100,000 has increased to 36/100K, with Barnstable County acquiring an average of 77 cases per day over the past 7 days. **57 new cases** were reported yesterday.



Nantucket's 7-day average cases per 100,000 population (now 27/100K) has dropped since last week but remains high. On average (7-day) Nantucket is now picking up 3 new cases per day. 9 cases were reported over the weekend (Friday to Sunday, inclusive) and 4 more cases were reported yesterday.

Martha's Vineyard's 7-day average cases per 100,000 population (11/100K) remains low. On average Dukes County is gaining approximately 2 new cases per day. 2 cases were reported over the weekend (Friday to Sunday, inclusive) and 1 case was reported yesterday.

Trailing 14-Day Testing and Cases by County:

In the context of adequate availability of testing and contact tracing, which our three counties appear to have achieved, a test percent positivity rate below 5% suggests that an outbreak is on the way to containment. Rates below 3% and 1% are further important containment milestones.

Test Positivity Rates (14-day, as of 3/17/21):

Barnstable County: 4.12% (vs. 3.22%) (higher vs. previous fortnight)
Dukes & Nantucket Counties: 2.32% (vs. 1.53%) (higher)

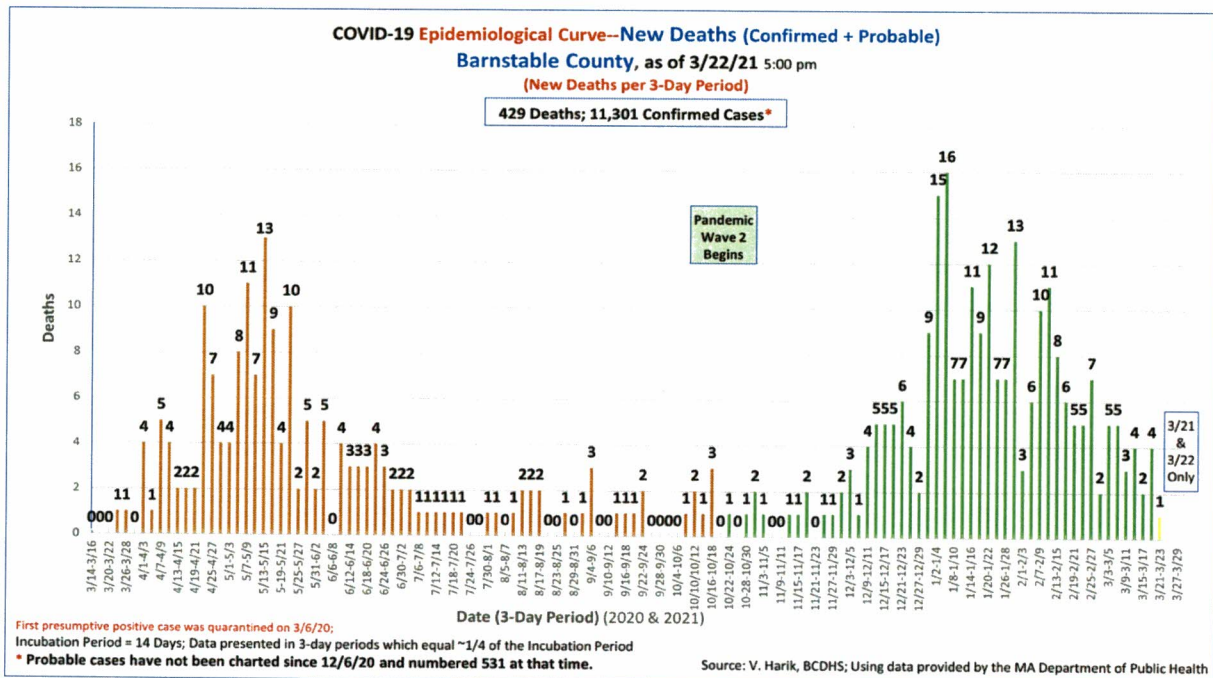
2. Hospitalizations and Fatalities

Hospitalizations and acuity of illness have **decreased very significantly** since the double peaks of the Wave 2 surge seen in mid-January and early February (corresponding Thanksgiving and Christmas holidays). Cape Cod Hospital and Falmouth Hospital have **resumed limited visitation** of inpatients.

Hospitalizations, Last Report:		Not Cumulative		Cumulative		3-Day Avg. of Persons in Hosp. (Med/Surg + ICU)	ICU Percent of Beds Occupied
		Hospital Beds Occupied (Last Report)	ICU Beds Occupied (Last Report)	Barnstable County Cases (Confirmed)	Barnstable County Deaths		
3/22/2021	Cape Cod Hospital	18	4	11,301	429	23.0	21%
	Falmouth Hospital	1	1				
		19	5				

Since DPH reporting of hospitalizations has a 2-day lag Tina Shaw of CCHC is providing me with more recent information (thank you Tina). Yesterday afternoon CCHC reported that there were **24 COVID patients in hospital**, 5 of which were in the ICU.

Fatalities: 2 fatalities were reported over the weekend. The total is **429**.



Recent data on COVID fatalities in Barnstable County suggest that residents of **Long Term Care/Skilled Nursing Facilities/Rest Homes** represent **42.5%** of all fatalities (167 of 393 fatalities, as of 2/25/21). This is a **lower** percentage than that seen during phase 1 of the pandemic last spring (over 65%), and **this percentage continues to fall**.

Indeed, between 1/5/21 and 2/23/21 only 20% of the County's 137 fatalities occurred among LTC residents.

This month marks the one-year **anniversary** of the recognition of the first COVID case in Massachusetts. In year 1 of this pandemic the **Barnstable County Case Fatality Rate (CFR) is 4%**, behind only Berkshire and Franklin Counties (which are also remote, rural locales), and is markedly higher than **the state CFR (2.8%)**.

3. Schools and Childcare Centers

School districts are staying vigilant and reacting well to new cases. School districts on the Cape and Islands are in a hybrid learning status, **however DESE Commissioner Jeffrey Riley has announced plans which will compel schools to return to 100% in-person learning, starting with elementary schools, in April. As such (and noted elsewhere), school and childcare teachers and staff became eligible for vaccinations on 3/11.**

DESE and the DPH (memo of 1/8/21) announced that they are seeking to introduce COVID-19 screening testing using a pooled strategy in the school setting. Schools may elect to participate by responding to a survey that DESE/DPH have posted. The status of this initiative is unclear at this time.

~~For the 2020-2021 school year the DPH has mandated that all school children be vaccinated for seasonal influenza. This week the DPH extended the deadline for doing so from 12/31/20 to 2/28/21. This mandate has been canceled by the DPH.~~

4. Testing

Additional testing locations in Barnstable County for both symptomatic and asymptomatic persons remain open in **Falmouth** at the Fairgrounds and in **Hyannis** at Cape Cod Hospital (the Melody Tent site has been given over to vaccination clinics). Daily testing capacity is 50 at the Falmouth site and 350 at the Hyannis site. Neither site is open daily and persons must call ahead for an appointment. Details: <https://www.capecodhealth.org/medical-services/infectious-disease/coronavirus/covid-19-testing-process/>.

In late December additional testing by **Outer Cape Community Health Services** began and continues at its 3 locations in Wellfleet, Harwich Port, and Provincetown (<https://outercape.org/2020/12/23/outer-cape-health-services-to-offer-covid-19-asymptomatic-testing-beginning-december-23/>). The **Community Health Center of Cape Cod** is also offering testing at its locations. These sites may not open be daily and persons must call ahead for an appointment.

Eligibility criteria for the testing include residency in Barnstable County. Testing is done by appointment only. Tests cost \$75, \$110 for travel-related tests, and no one will be turned away if unable to pay for a test.

DPH-mandated **routine testing** in skilled nursing facilities/long term care settings (SNF/LTC) continues. This provides critical surveillance and allows these facilities to stay ahead of asymptomatic spread amongst staff and residents. Routine testing in SNF/LTC settings is conducted weekly for staff.

In addition, the State's **BinaxNOW rapid testing program** (available to **schools**) has been extended to visitors of **nursing homes** and rest home residents (LTC settings) to allow visitation of residents while limiting the risk of infection from visitors. DPH has published guidance on this. The program has also been extended to **homeless shelters** and management of these facilities may apply to the EEC and DPH for testing kits.

5. Weekly Town Risk and Statewide Cluster Analyses

MA DPH Data Dashboard, WEEKLY REPORT of 3/18/21 (for the Period 2/28/21 to 3/13/21)

City/Town	Population	(March 2020 to Present) Total Case Count	Case Count Last 14 Days	Average Daily Incidence Rate per 100K	Relative Change in Case Count	(March 2020 to Present) Total Tests	Total Tests Last 14 Days	Positive Tests Last 14 Days	Percent Positivity Last 14 Days	Change in Percent Positivity
Barnstable	44,773	3,283	283	45.1	Higher	64,532	3,954	296	7.49%	Higher
Bourne	21,026	1,077	44	14.9	Lower	37,211	2,395	56	2.34%	No Change
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Barn. County % of Total MA Tests		1.80%
Barn. County % of MA Tests, Past Two Weeks		1.50%
Barn. County % of MA Total Confirmed Cases		1.90%
Barn. County % of MA Confirmed Cases, Past Two Weeks		3.51%
MA % Positive Tests Last 14 Days		1.83%
Barnstable County % Positive Tests Last 14 Days		4.12%

Active COVID Clusters by Exposure Setting Type for the Period 2/14/21 to 3/13/21 (as of 3/18/21)

Source: <https://www.mass.gov/info-details/covid-19-response-reporting>. Tabulation: V. Harik, Barnstable County DHS

Sorted by Number of Cases in New Cluster Settings

	Exposure Setting	New Clusters (Identified 2/14/21 – 3/13/21)			Ongoing Clusters (Cluster Identified Prior to 2/14/21 But Not Meeting Criteria for Closing)			Total		
		Clusters	Confirmed Cases	Close Contacts	Clusters	Confirmed Cases	Close Contacts	Clusters	Confirmed Cases	Close Contacts
1	Household	6,148	15,670	0	17,174	2,426	0	23,322	18,096	0
2	Child Care	72	245	240	219	162	162	291	407	402
3	Colleges & Universities	31	224	89	59	65	51	90	289	140
4	Long Term Care Facilities	25	91	0	121	248	0	146	339	0
5	K-12 Schools	15	74	82	36	3	45	51	77	127
6	Organized Athletics/Camps	14	66	174	59	14	85	73	80	259
7	Restaurants & Food Courts	15	63	21	27	8	4	42	71	25
8	Industrial Settings	11	57	6	41	54	55	52	111	61
9	Social Gatherings	9	52	39	13	7	13	22	59	52
10	Retail & Services	9	40	2	42	25	8	51	65	10

6. Vaccination

Groups eligible for vaccination now are those in Phase 1, and Phase 2 age 60+, K-12 and early education/childcare teachers and staff, and certain workers (formerly termed essential workers; see table below), **depending upon availability of vaccine.**

Caregivers (regardless of age) **accompanying a 75+ person to their vaccination appointment** remain eligible for vaccination and can receive vaccination under these circumstances at DPH mass vaccination sites. Local vaccination clinics may also allow this, but most are not doing so because of constrained vaccine supplies.

The DPH has released the timeline by which all remaining groups will become eligible for vaccination:

Timeline for remaining groups:

March 22nd : Residents 60+ and certain workers (see <https://www.mass.gov/info-details/covid-19-vaccinations-for-certain-workers>)

April 5th : Residents 55+ and residents with one certain medical condition

April 19th: General public ages 16 years of age and older

The following workers become eligible for vaccination on March 22, 2021:

Worker category	Definition / examples (if applicable)
Restaurant or cafe workers	Cooks, servers, maintenance staff, managers, cashiers
Food, meatpacking, beverage, agriculture, consumer goods, retail, or food service workers	All staff involved in the production, processing, storage, transport, wholesale and retail sale, preparation, and service of food and consumer goods, including farm and other agricultural workers, including farm stand and nurseries
Grocery and convenience store workers	Cashiers, baggers, stockers, managers, maintenance staff, security staff
Food pantry workers or volunteers	
Medical supply chain workers	Workers directly involved in the manufacturing and production, packaging, transport, quality control, and sale of materials critical to the delivery of medical care
Vaccine development workers	Workers directly involved in research, development, manufacturing and production, packaging, transport, quality control, and sale of vaccines (COVID-19 and others)
Transit/transportation workers	Drivers/operators, attendants, sales, administrators, maintenance staff, public and private bus, train/subway, passenger boat/ferries, passenger air, and automobile (including rental car, car service/limousine, taxi, and ride apps) transportation, bridge and road construction and maintenance workers, shipping port and terminal workers, commercial transportation
Public works, water, wastewater, or utility workers	Utility: Electrical generation and supply system, natural gas delivery, nuclear power plant, water supply, telephone, cable/fiber optical/broadband/cellular service workers Public works including street repair, street lighting, public park, beach, and trail maintenance workers.
Sanitation workers	Drivers, solid waste handlers, recycling staff, street cleaners, sewer and storm water system workers
Public health workers	Public-facing federal, state, and local governmental public health workers
Court system worker (judges, prosecutors, defense attorneys, clerks), other than court officers who are listed under first responders	Criminal court workers, including judges, prosecutors, public defenders, private defense attorneys, clerks, maintenance workers
Funeral directors and funeral workers	Funeral directors/morticians, other funeral workers (funeral home staff, drivers, maintenance workers, cemetery workers, funeral cosmetology workers)

Vaccination at local clinics during Phase 2 is by appointment only and **appointments are announced and able to be scheduled once County and local health authorities are sure of vaccine availability from the DPH.** The public is being given notice of planned vaccination clinics for eligible persons in Phase 2.

Appointments (<https://www.cic-health.com/vaccines-location>) may not be immediately available due to overwhelming demand and still-limited supply of vaccine from the manufacturers. **Appointments for local vaccination clinics are only being scheduled once County and local health authorities can be sure of vaccine availability from the DPH.** The public is being given notice of planned vaccination clinics for eligible persons in Phase 2.

Vaccination is available at several **State-run mass vaccination sites** around Massachusetts. The closest ones to Cape Cod are at **Gillette Stadium in Foxboro and in Dartmouth.** Appointments can be scheduled by visiting <https://www.cic-health.com/vaccines-location>, or calling **2-1-1** and following the prompts if the citizen does not have access to/or cannot operate on the internet.

-Plans for 4-5 sub-regional mass vaccination sites on Cape Cod, for operation during Phase 2, are in place. A **Cape Cod Regional Vaccine Consortium** has been established via a partnership between the Barnstable County Health Dept, Local Town Boards of Health (LBOHs), Community Health Centers (CHCs), and Cape Cod Healthcare, and has received support from the DPH. The Consortium has established a **vaccination site at Cape Cod Community College** and is also working with LBOHs and CHC to **organize in-reach to homebound persons** to vaccinate them. **The DPH is responsible for providing sufficient vaccine in order for the Consortium to reach its full potential.**

Harbor Health Services, Inc. (Hyannis) will join the other three Federally Qualified Community Health Centers on Cape Cod in offering **vaccination clinics.**

The State has contracted with **CVS and Walgreens** to arrange vaccination of **older adults in SNFs/congregate care.** **CVS, Walgreens, and Stop & Shop pharmacies** are also scheduling vaccinations for the groups in Phase 2, again depending upon vaccine supply.

The DPH has is reporting vaccination progress age group and by town.

Massachusetts Department of Public Health COVID-19 Dashboard – Thursday, March 11, 2021

Individuals with at Least One Dose Administered by County and Age Group, as of 3/9/21

Source: Data, MA DPH; Analysis, V. Harik, Barnstable County Dept. of Human Services

Barnstable County	0-19 Years	20-29 Years	30-39 Years	40-49 Years	50-59 Years	60-64 Years	65-69 Years	70-74 Years	75+ Years	Total
Total Population by Age Bracket	36,252	22,041	18,884	19,841	31,497	20,219	20,609	18,355	28,931	216,629
Age Bracket % of County Pop.	17%	10%	9%	9%	15%	9%	10%	8%	13%	
Persons in Age Group with at Least One Dose	96	2,204	3,210	3,968	6,929	5,055	10,511	10,462	23,434	65,870
Percent of Age Group with at Least One Dose	0.26%	10%	17%	20%	22%	25%	51%	57%	81%	30%
Persons in Age Group Not Yet Vaccinated.	36,156	19,837	15,674	15,873	24,568	15,164	10,098	7,893	5,497	150,759
Percent of Age Group Not Yet Vaccinated	99.7%	90%	83%	80%	78%	75%	49%	43%	19%	70%

* Due to privacy concerns, vaccination figures are suppressed where less than 30 persons are vaccinated.

7. COVID Mutation and Changes in Transmissibility/Virulence/Other

The emergence of a variant of the COVID-19 virus in the UK, classified as B.1.1.7, was identified in September and publicized in early December. Reports hold that B117 is 50% - 70% more contagious than our predominant variant now circulating (D614G). Within three months of the variant being identified in the UK it became dominant strain circulating there. Additional variants of concern have emerged internationally: **B1351** (South Africa) and Brazil (**P1**) which are also highly transmissible. An additional variant, **B1526**, emerged in New York City in November. Its features are being studied.

All variants appear to be significantly more transmissible than the virus which dominated Wave 1 of the pandemic.

The first three variants are spreading globally and have been detected in the US. The B1526 (NYC) variant now accounts for 40% of new cases in New York City. The B117, B1351, and P1 variants have been identified by the DPH as being in circulation in MA. The first case with the P1 variant was identified last week in Barnstable County.

Researchers are working to determine if the variants differ from D614G (the Wave 1 configuration) in terms of: **1.** How sick people become, **2.** If natural immunity is different following infection with D614G, and **3.** If immunity from vaccination differs since the vaccine was developed during the period that D614G has been predominant. **The existing vaccines may be less effective against the new strains. Moderna and Pfizer are working on booster shots to counter these new strains.**

The CDC is posting surveillance information on the emergence of the variants in the US: <https://www.cdc.gov/coronavirus/2019-ncov/transmission/variant-cases.html>.

Vaira Harik, M.S.

Deputy Director
Barnstable County Dept. of Human Services
Cell: 520-271-6314
Email: vharik@barnstablecounty.org

V-A.

**APRIL 20, 2021
BOARD OF HEALTH MEETING**

To: Board of Health
From: Kathleen O'Neill, Health Director
Owner: Randy C. Rose III
Address: 44 Pine Grove Road

The property owner is applying for a reconsideration of a previous condition placed on October 29, 1996. The condition reads "There is to be no increase of square footage beyond that shown on a plan dated October 14, 1996." The applicant is requesting removal of the square footage limitation to allow for the existing finished attic bedroom and deconstruction of dining room wall to eliminate one (1) bedroom downstairs to maintain three (3) bedroom compliance.

Other conditions that were placed in 1996 were:

- System is to be inspected and maintained if necessary every three (3) years.
- There is no provision for a garbage disposal with this plan.
- Variances are to be recorded with the Barnstable County Registry of Deeds and Harwich Town Clerk.

History of the property:

The Health Department received a Title 5 Inspection report on March 1, 2021. The Title 5 Inspector provided a floor plan and photos showing that the attic space had been finished without benefit of a permit and that the attic contains built-in beds and affords privacy. Therefore, the attic is considered a 4th bedroom. The septic system for this property is not adequate to support four (4) bedrooms.

On March 25, 2021, the owner applied for an after the fact building permit application for the finish work in the attic including knee walls, insulation, minor electrical, drywall and paint work. The permit application also includes the request to remove the wall between bedroom three (3) and dining room to maintain a three (3) bedroom total dwelling.

I recommend approval with conditions (please see suggested motion, Option #2, below).

SUGGESTED MOTIONS FOR BOARD CONSIDERATION

IF THE BOARD IS NOT READY TO VOTE, DO NOT CLOSE THE PUBLIC HEARING, BUT CONTINUE THE HEARING TO A DATE AND TIME CERTAIN (OPTION #1).

Option #1: Continuance If the Board will require additional information or wants to take the matter under advisement the following motion is recommended: Move to continue the hearing

for 44 Pine Grove Road, to no earlier than 7:00 pm on _____ (Next Meeting Date: May 18, 2021) for the following reason(s): Need to provide reasons for the continuance- additional information, take under advisement, etc.

IF THE BOARD IS READY TO CLOSE THE HEARING AND VOTE:

Option #2: Approve the reconsideration of a previous condition placed on October 29, 1996 located at 44 Pine Grove Road with the following conditions:

1. No further expansion of square footage, habitable space is allowed without further review of the Board of Health.
2. The dwelling is restricted to a maximum of 3 bedrooms.
3. The reconsideration approval shall be recorded at the Barnstable County Registry of Deeds.
4. All previous conditions apply.

Option #3: Move to deny the variance reconsideration request for 44 Pine Grove Road. The denial is based on the fact that the application does not meet the necessary requirements and criteria for approval pursuant to the Code of Town of Harwich, specifically: (Need to list or note which requirements/criteria are not being met).



**Town of Harwich
Board of Health**

732 Main Street Harwich, MA 02645
508-430-7509 – Fax 508-430-7531
E-mail: health@town.harwich.ma.us

Office Use Only	
Filing Fee Paid/Amount:	\$125-
Check #/Cash:	1054
Date App Received:	4/7/21
Meeting Date:	4/20/21
Date Approved:	
Date Denied:	
Reason for Denial:	

Application for Board of Health Variances



Date: 6 Apr 2021

Property Address: 44 Pine Grove Rd West Harwich MA 02671

Map: 18 Parcel: V3-8

Book: 137 Page: 847 Land Court No: _____

Name of Applicant: Randy C. Rose III

Applicant Mailing Address: 44 Pine Grove Rd

West Harwich MA 02671

City State Zip Code

Applicant Telephone Number: 508-241-4698

Applicant E-Mail Address: rose5869@gmail.com

Owner(s) of Record: Randy C. Rose III

Owner(s) Mailing Address: 44 Pine Grove Rd

West Harwich MA 02671

City State Zip Code

Design Engineer/Sanitarian: N/A

Firm/Company Name: _____

Mailing Address: _____

City State Zip Code

Telephone Number: _____

Design Engineer/Sanitarian E-Mail Address: _____

Please Choose Application Type:

Voluntary Upgrade: ____ Addition/Alteration: X Failed System: ____ EIR: ____
 Other: Reconsideration of Existing Variance Conditions

Conservation Commission Approval Required: No: x Yes: ____ Date of CC Hearing: _____

List All Variances from State & Local Codes

Title 5, Section #	Description of Variance(s):
	Requesting reconsideration on order existing conditions of variance dated Nov 21, 1996.
	Original conditions stated no additional square footage could be added to home based on
	plan dated Oct 14, 1996. Requesting removal of square footage limitation to allow for
	finished attic bedroom and deconstruction of dining room wall to eliminate one bedroom
	down stairs to maintain 3 bedroom compliance.
Harwich Reg. #	Description of Variance(s):

In addition to this form, 8 packets of the following must be submitted by 4:00 p.m. on the filing deadline date:

- Letter to Board of Health
- Letter to abutters (bring certified mail receipts to the meeting)
- Copy of certified abutter list
- Existing variance letter (if applicable)
- Floor plans (all floors/existing & proposed)
- Site plan
- Filing Fee \$125.00 (Variance)/\$300.00 (EIR)



Town of Harwich

Board of Health

732 Main Street Harwich, MA 02645
Phone: 508-430-7509 Fax: 508-430-7531
health@town.harwich.ma.us

March 19, 2021

Rose Randy C Iii
44 PINE GROVE RD
W HARWICH, MA 02671

NOTICE OF VIOLATION

Upon receipt of the real estate inspection report for the sewage system

Owned by: ROSE RANDY C III &
Located at: 44 Pine Grove Rd, Harwich, Ma

TYPE: ADMINISTRATIVE FAILURE

COMMENTS:

*The septic system is designed for 3 bedrooms. The attic has been finished without the benefit of a permit and contains built-in beds and affords privacy. Therefore, the attic is considered a 4th bedroom.
The septic system is not adequate to support 4 bedrooms.*

Please be advised that the above ordered corrections are necessary to bring the system into conformance with Title 5 and Harwich Board of Health regulations.

You have the right to petition the Board of Health for a hearing to show cause why this order should be modified or withdrawn. Said petition must be in writing and be received by this department within seven days of receipt of this notice. You have the right to inspect and obtain copies of all relevant inspection or investigation reports, orders and notices and other documentary information in the possession of the Board of Health and the right to be represented at the hearing and that any affected party has a right to appear at said meeting.

HEALTH INSPECTOR



Please be advised of ADDITIONAL BOARD OF HEALTH REGULATIONS:

(1) All underground tanks must be registered with the Board of Health and are subject to testing requirements; and (2) All private wells are required to be analyzed at the time of property transfer. Contact the Health Office for further information.

cc: Wall Septic Service

28 Mar, 2021

Randy C. Rose
44 Pine Grove Rd.
West Harwich, MA 02671
(508)241-4696
rrose5869@gmail.com

Town of Harwich
732 Main St.
Harwich, MA 02645
Attn.: Board of Health

Dear Sir or Madam:

Please find attached BOH Variance application for your review. I'm active duty military in the process of selling my home and have transfer orders to NC with the US Coast Guard. During the septic inspection it was noted I had finished my attic for addition bunk room for my kids. I received a Notice of Violation from the Health department that this space is considered a 4th bedroom and my septic system is designed for 3 bedrooms. I did not properly research and failed to determine if my home could be altered. I apologize for creating this hassle and have already applied for "after the fact" building permit in addition to requesting to the removal of doors and deconstruct part of a wall between a first floor bedroom and dining to return to 3-bedroom compliance.

Also during my inquiries I was informed of variances on my property from 1996 when a new septic system was installed. I was not disclosed this during my purchase. The approved variance dated Nov 21, 1996 stated no additional square footage could be added based on the septic plans dated Oct 14, 1996. I am requesting reconsideration of the original conditions to maintain the addition square footage of the attic for the new owners and correct the Title V discrepancy by deconstruction one 1st floor bedroom discussed above. The building permit is requesting 'after the fact' for the attic space and deconstructing the wall between bedroom and dining room is new construction.

Lastly, I have tried to give all the information you need to insure this can go thru as efficiently as possible. I have pending closing dates on this home, a new home in NC, and execution of my permanent change of station in the next 45 days. I know this is not an issue you created but I would request if you need any additional information that you contact me as soon as possible so we can keep it moving along and possibly resolve the issue at your next available meeting.

I'm working to meet with the Health director while simultaneously requesting the proper building permits in order to expedite the matter. Thank in advance for your review and consideration.

Sincerely,



Randy C. Rose III
COW4, Naval Engineer
U. S. Coast Guard

- Enclosure: (1) BOH Variance Application and All Required Documents
(2) Nov 21, 1996 Variance Letter and Oct 14, 1996 Septic Plan
(3) BOH Title V Inspection Notice of Violation

Public Hearing Notice

Date: April 5, 2021

Abutter's Name: ***Example***

Abutter's Mailing Address: _____

Re: 44 Pine Grove Rd, West Harwich MA 02671

Property Owner: Randy C. Rose III

CERTIFIED MAIL RETURN RECEIPT REQUESTED

Dear Abutter:

A public hearing has been scheduled for the Harwich Board of Health to take action on an application for variances from the regulations of the Harwich Board of Health and/or Title 5 for Subsurface Disposal of Sewage. The following variances are requested:

Title 5, Section #	Description of Variance(s):
	Requesting reconsideration on order existing conditions of variance dated Nov 21, 1996. Original conditions stated no additional square footage could be added to home based on plan dated Oct 14, 1996. Requesting removal of square footage limitation to allow for finished attic bedroom and deconstruction of dining room wall to eliminate one bedroom down stairs to maintain 3 bedroom compliance.
Harwich Reg. #	Description of Variance(s):

Said hearing will be held on April 20th, 2021 at no earlier than 7:00 p.m.

Pursuant to Governor Baker's March 12, 2020 Order Suspending Certain Provisions of the Open Meeting Law, G.L. c. 30A, §20, and the Governor's March 15, 2020 Order imposing strict limitations on the number of people that may gather in one place, this meeting of the Harwich Board of Health is being conducted via remote participation. No in-person attendance of members of the public will be permitted, but every effort will be made to ensure that the public can adequately access the proceedings as provided for in the Order. The agenda, including dial-in instructions, will be posted on the Town of Harwich website <https://link.edqepilot.com/s/c4e05a7f/OthhKc65q0uijGFonPzWUq?u=https://www.harwich-ma.gov/>

Sincerely,

Randy C. Rose III

CC: Harwich Health Department

10-A2-0-R

LEHRER CAROLE ANN TR
CAROLE A LEHRER FAMILY TRUST
35 MARY AVE
POUGHKEEPSIE, NY 12603

10-B2-2-0-R

LABELLA VITO &
JALET KIM M
7711 RIDGE BLVD
BROOKLYN, NY 11209

10-B2-B-0-R

MARSDEN CHASE A
26 DEPOT ROAD WEST
W HARWICH, MA 02671

18-V3-8-0-R

ROSE RANDY C III
44 PINE GROVE RD
W HARWICH, MA 02671

18-V3-9-0-R

COURI MEGAN, COURI ALVARO ET AL
ZECHOWSKI JOHN F
40 PINE GROVE RD
HARWICH, MA 02645

18-V3-13-0-R

MANN PAUL T
57 OAK HOLLOW DR
LONGMEADOW, MA 01106

18-V3-14-0-R

OCONNOR THOMAS J &
OCONNOR JENNIFER A
6 JUNIPER LN
MEDFIELD, MA 02052

7019 2280 0001 574J 5806

U.S. Postal Service™
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 Domestic Mail Only

For delivery information, visit our website at www.usps.com®.

West Harwich, MA 02671

OFFICIAL USE

Certified Mail Fee	\$3.60	0671
Extra Services & Fees (check box, add fee as appropriate)	\$2.85	02
<input type="checkbox"/> Return Receipt (hardcopy)	\$0.00	
<input type="checkbox"/> Return Receipt (electronic)	\$0.00	
<input type="checkbox"/> Certified Mail Restricted Delivery	\$0.00	
<input type="checkbox"/> Adult Signature Required	\$0.00	
<input type="checkbox"/> Adult Signature Restricted Delivery	\$0.00	
Postage	\$0.55	
Total Postage and Fees	\$7.00	04/05/2021

Sent To: **MARSDEN, CHASE A**
 Street and Apt. No., or PO Box No.: **26 DEPOT RD WEST**
 City, State, ZIP+4®: **W. HARWICH MA 02671**

PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions

7019 2280 0001 574J 5820

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Lonsmeadow, MA 01406

OFFICIAL USE

Certified Mail Fee	\$3.60	0671
Extra Services & Fees (check box, add fee as appropriate)	\$2.85	02
<input type="checkbox"/> Return Receipt (hardcopy)	\$0.00	
<input type="checkbox"/> Return Receipt (electronic)	\$0.00	
<input type="checkbox"/> Certified Mail Restricted Delivery	\$0.00	
<input type="checkbox"/> Adult Signature Required	\$0.00	
<input type="checkbox"/> Adult Signature Restricted Delivery	\$0.00	
Postage	\$0.55	
Total Postage and Fees	\$7.00	04/05/2021

Sent To: **MANN PAUL T**
 Street and Apt. No., or PO Box No.: **57 OAK HOLLOW DR**
 City, State, ZIP+4®: **LONSMADOW, MA 01406**

PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions

7019 2280 0001 574J 5813

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West Harwich, MA 02671

OFFICIAL USE

Certified Mail Fee	\$3.60	0671
Extra Services & Fees (check box, add fee as appropriate)	\$2.85	02
<input type="checkbox"/> Return Receipt (hardcopy)	\$0.00	
<input type="checkbox"/> Return Receipt (electronic)	\$0.00	
<input type="checkbox"/> Certified Mail Restricted Delivery	\$0.00	
<input type="checkbox"/> Adult Signature Required	\$0.00	
<input type="checkbox"/> Adult Signature Restricted Delivery	\$0.00	
Postage	\$0.55	
Total Postage and Fees	\$7.00	04/05/2021

Sent To: **COURT MEGAN AND ALVARO**
 Street and Apt. No., or PO Box No.: **40 PINE GROVE RD**
 City, State, ZIP+4®: **W. HARWICH, MA 02671**

PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions

7019 2280 0001 574J 5837

U.S. Postal Service™
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For delivery information, visit our website at www.usps.com®.

Medfield, MA 02052

OFFICIAL USE

Certified Mail Fee	\$3.60	0671
Extra Services & Fees (check box, add fee as appropriate)	\$2.85	02
<input type="checkbox"/> Return Receipt (hardcopy)	\$0.00	
<input type="checkbox"/> Return Receipt (electronic)	\$0.00	
<input type="checkbox"/> Certified Mail Restricted Delivery	\$0.00	
<input type="checkbox"/> Adult Signature Required	\$0.00	
<input type="checkbox"/> Adult Signature Restricted Delivery	\$0.00	
Postage	\$0.55	
Total Postage and Fees	\$7.00	04/05/2021

Sent To: **THOMAS & JENNIFER O'CONNOR**
 Street and Apt. No., or PO Box No.: **6 SUMMIT LN**
 City, State, ZIP+4®: **MEDFIELD, MA 02052**

PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions

7019 2280 0001 574J 5790

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For delivery information, visit our website at www.usps.com®.

Brooklyn, NY 11209

OFFICIAL USE

Certified Mail Fee	\$3.60	0671
Extra Services & Fees (check box, add fee as appropriate)	\$2.85	02
<input type="checkbox"/> Return Receipt (hardcopy)	\$0.00	
<input type="checkbox"/> Return Receipt (electronic)	\$0.00	
<input type="checkbox"/> Certified Mail Restricted Delivery	\$0.00	
<input type="checkbox"/> Adult Signature Required	\$0.00	
<input type="checkbox"/> Adult Signature Restricted Delivery	\$0.00	
Postage	\$0.55	
Total Postage and Fees	\$7.00	04/05/2021

Sent To: **LABELLA VITO @ KIM**
 Street and Apt. No., or PO Box No.: **7711 RIDGE BLVD**
 City, State, ZIP+4®: **BROOKLYN, NY 11209**

PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions

7019 2280 0001 574J 5775

U.S. Postal Service™
CERTIFIED MAIL® RECEIPT
 Domestic Mail Only

For delivery information, visit our website at www.usps.com®.

Poughkeepsie, NY 12603

OFFICIAL USE

Certified Mail Fee	\$3.60	0671
Extra Services & Fees (check box, add fee as appropriate)	\$2.85	02
<input type="checkbox"/> Return Receipt (hardcopy)	\$0.00	
<input type="checkbox"/> Return Receipt (electronic)	\$0.00	
<input type="checkbox"/> Certified Mail Restricted Delivery	\$0.00	
<input type="checkbox"/> Adult Signature Required	\$0.00	
<input type="checkbox"/> Adult Signature Restricted Delivery	\$0.00	
Postage	\$0.55	
Total Postage and Fees	\$7.00	04/05/2021

Sent To: **LEHAR CAROLE ANN TR**
 Street and Apt. No., or PO Box No.: **35 MARY AVE**
 City, State, ZIP+4®: **POUGHKEEPSIE, NY 12603**

PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions



TOWN OF HARWICH

BOARD OF HEALTH
732 Main Street
Harwich, MA 02645
508/430-7509
FAX 508/432-5039

November 21, 1996

Harwich Board of Health
Variance Approval

Estate of Dan Thompson
c/o Leonard Dinoia
44 Pine Grove Road
West Harwich, MA 02671

re: 44 Pine Grove Road

Dear Mr. Dinoia:

At a meeting of the Board of Health on October 29, 1996 a hearing was conducted to consider requests from Harwich regulations to replace a sewage disposal system at the above referenced property.

After considerable review and discussion it was a decision of the Board to grant the variances for maximum feasible compliance.

1. Distance between leaching and property line, 10' required, 5' available.
2. Distance between reserve area and property line, 10' required, 5' available.
3. Distance between leaching and cellar wall, 20' required, 11' available.

In granting the variances the Board imposed the following orders of condition:

1. There is to be no increase of square footage beyond that shown on a plan dated October 14, 1996.
2. System is to be inspected and maintained if necessary every three years.
3. There is no provision for a garbage disposal with this plan.
4. Variances are to be recorded with the Barnstable Registry of Deeds and Harwich Town Clerk.

BK : 10514-265 69321

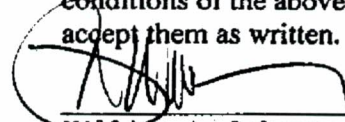
Please be advised that all variances will be considered null and void unless a permit is obtained within six months of the date of the hearing.

Sincerely,



Paula J. Champagne, R.S., C.H.O.,
Health Director

I have read and fully understand the conditions of the above variance and accept them as written.



William A. Doherty, Jr.
Attorney for the Estate of Daniel B. Thompson

PJC:jms

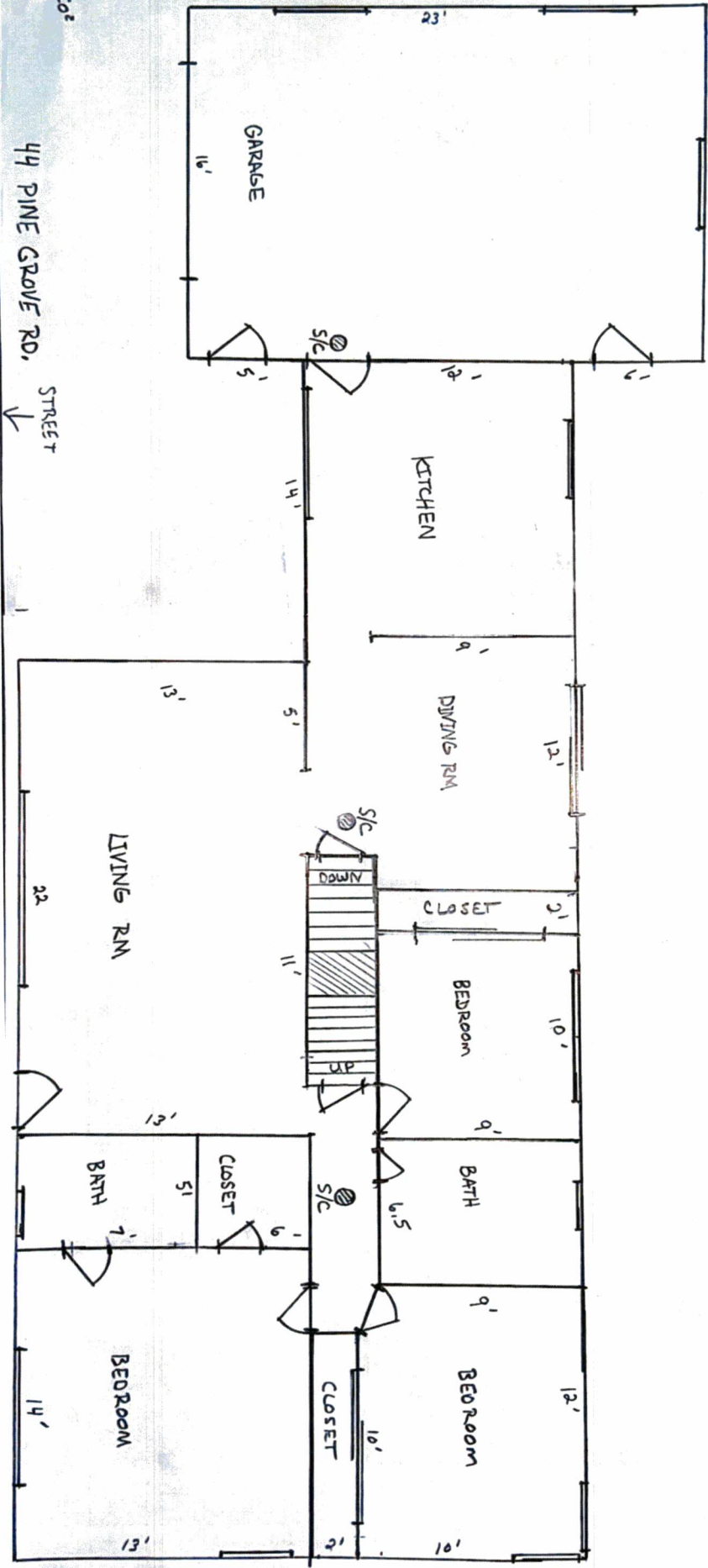
cert. mail #Z125469829
cc: Moran Engineering

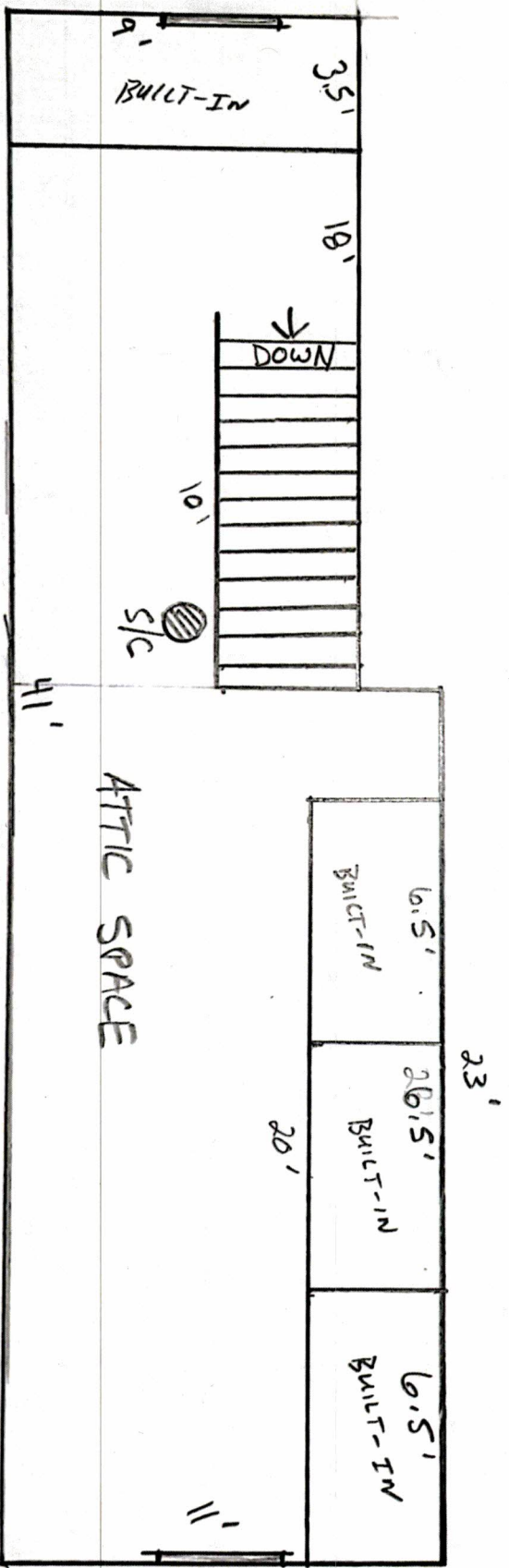
HUNT & DOHERTY
Attorneys at Law
783 Main Street
South Harwich, Mass. 02661

BARNSTABLE REGISTRY OF DEEDS

Smoke/Co₂
S/C

44 PINE GROVE RD.
STREET



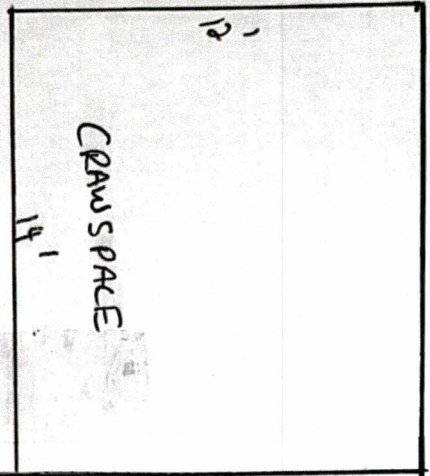


Smoke/CO2
s/c

STREET ↓

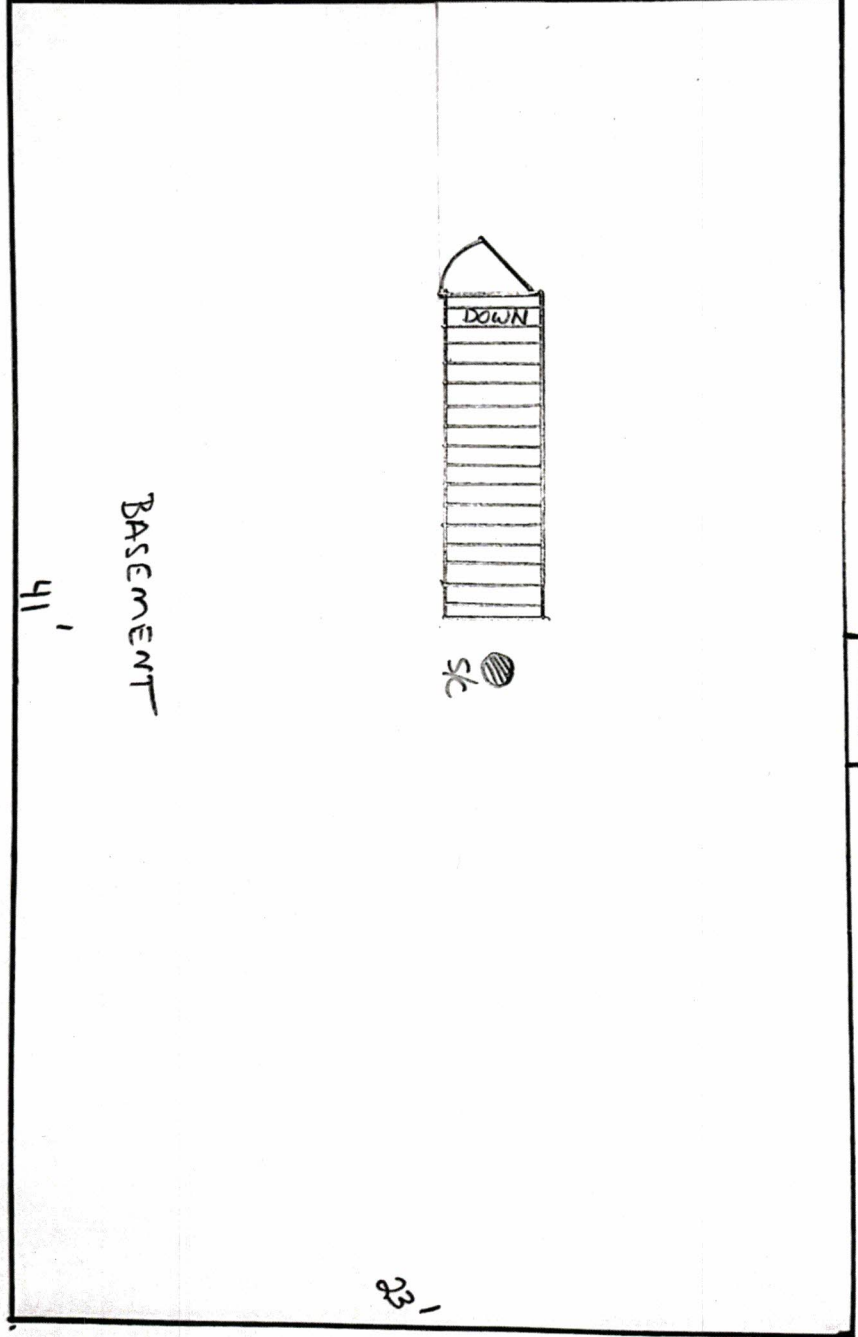
44 PINE GROVE RD.

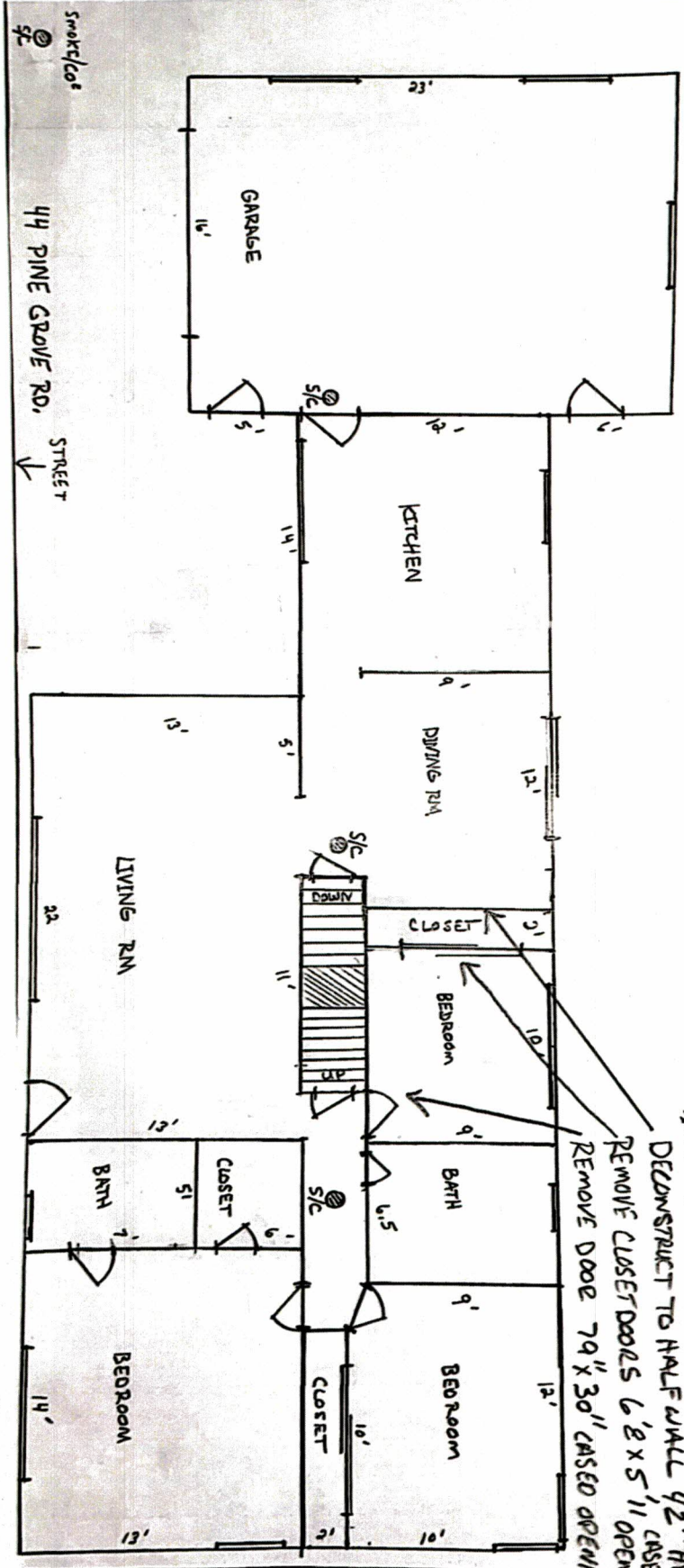
Smoke/CO²
s/c



STREET
↓

44 PINE GROVE RD.



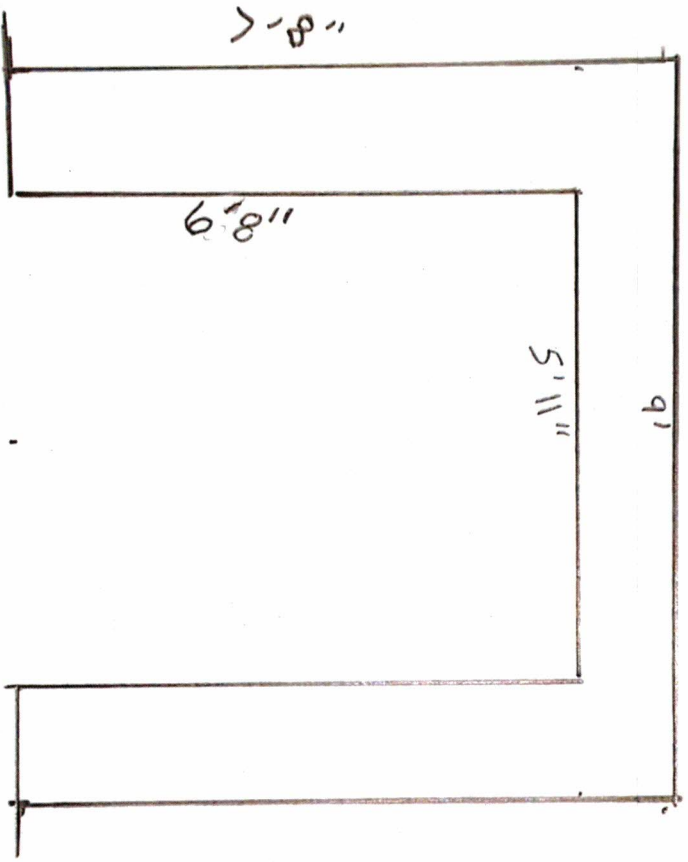


smoke/co²
sf

44 PINE GROVE RD.
STREET

* SEE OTHER DRAWINGS
* HALLWAY BC EXISTING HEEL'S ELEV.
* NOT LOAD BEARING WALL
DECONSTRUCT TO HALF WALL 42" HIGH.
REMOVE CLOSET DOORS 6'2" X 5'11" OPEN
REMOVE DOOR 79" X 30" CASSED OPENING

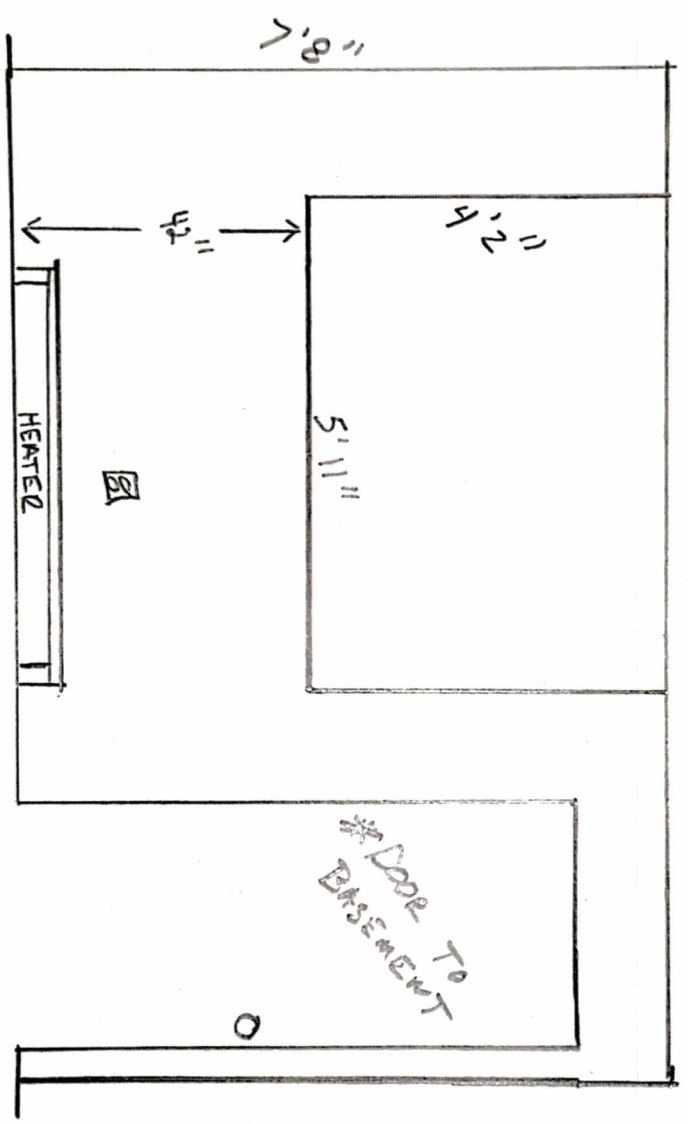
* EXISTING CLOSET WALL, NO WORK JUST REMOVE DOORS.



* BEDROOM 3 REMOVE CLOSET DOORS ON WALL BETWEEN BEDROOM AND DINING ROOM LEAVING CASED OPENING.

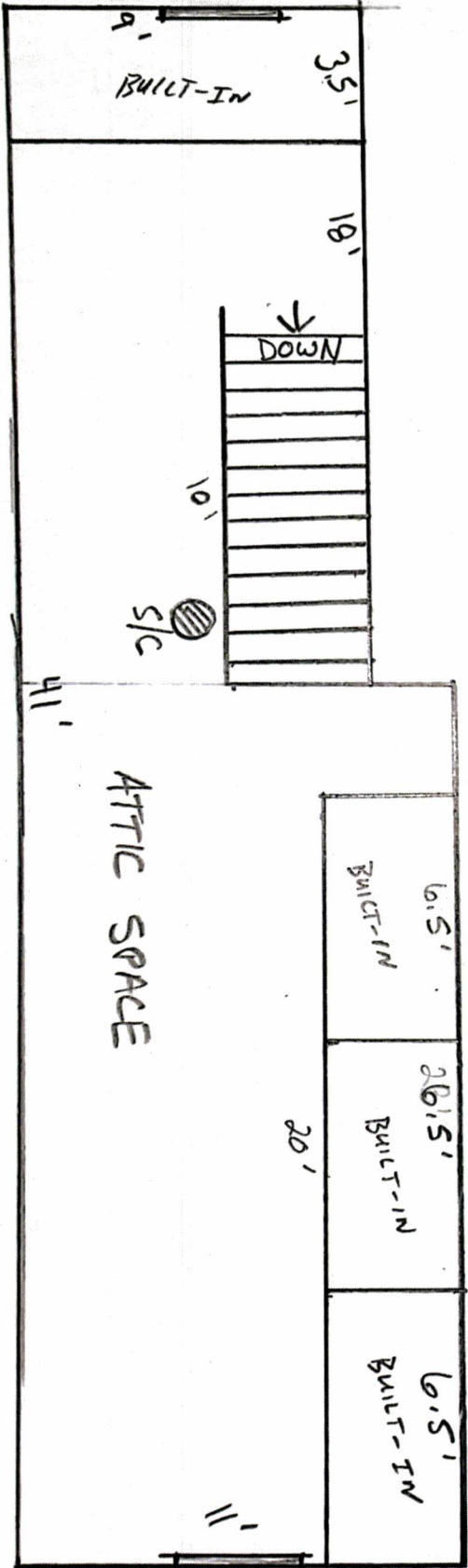
44 PINE GROVE RD.

* NOT LOAD BEARING. JOIST TRAVEL SAME DIRECTION AS WALL.



* DINING ROOM WALL. BACK OF CLOSET MAKE HALF WALL 42" HIGH WITH CASSED OPENING 5'11" X 4'2" TO REMOVE PRIVACY AND NO LONGER BE CONSIDERED BEDROOM, HALF WALL DUE TO HEAT AND ELECTRIC

44 PINE GROVE RD.



Smoke/CO2
s/c

STREET ↓

44 PINE GROVE RD.

COVERAGE:		
EXISTING—		
DWELLING/WALKWAYS	2,257 S.F.±	19.68%
SHED/COOP	190 S.F.±	01.66%
DRIVEWAY	656 S.F.±	05.72%
TOTAL	3,103 S.F.±	27.06%

ASSESSORS MAP: 18

PARCEL: V3-8

ZONING CLASSIFICATION: RM

REQUIRED:

AREA—40,000 SQ.FT.

FRONTAGE—150'

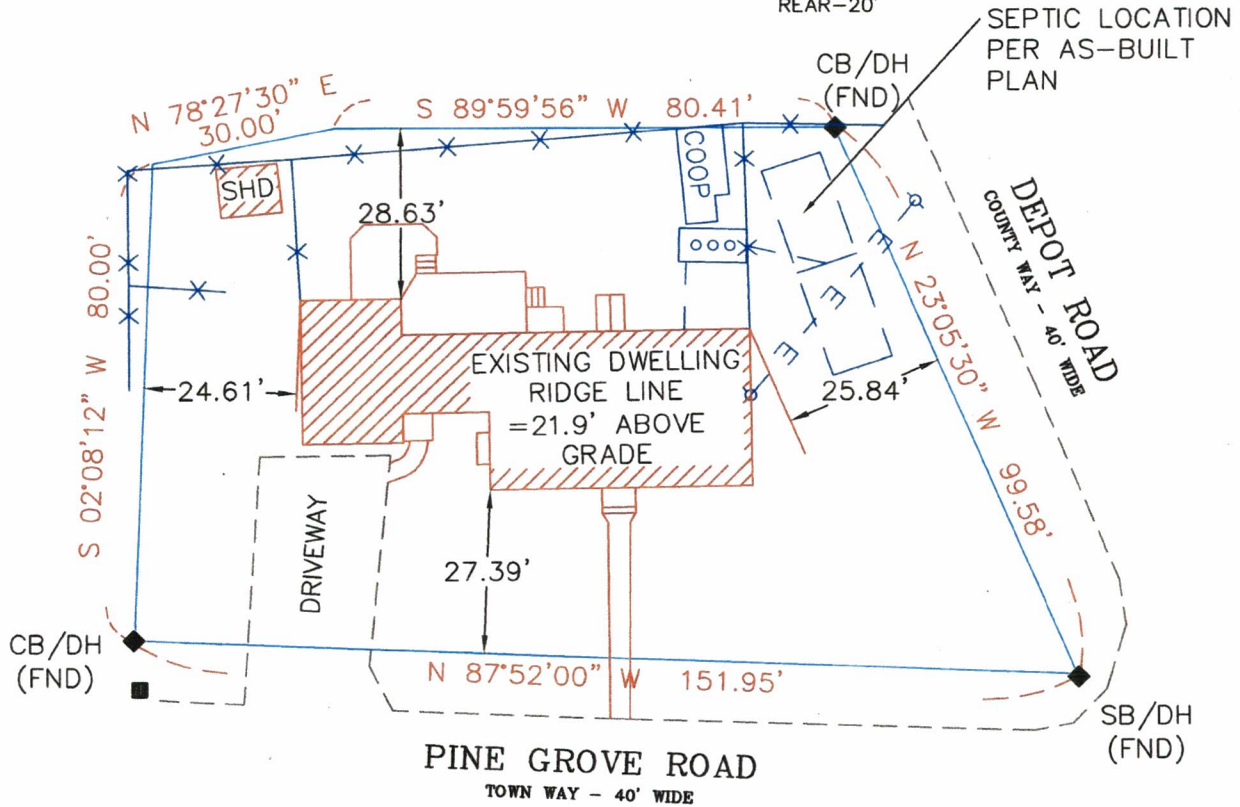
SETBACKS:

FRONT—25'

SIDE—20'

REAR—20'

LOT V8
11,466 SQ.FT.±
0.26 ACRES±



**CERTIFIED PLOT PLAN
OF LAND IN WEST HARWICH, MASSACHUSETTS
AS PREPARED FOR RANDY C. ROSE III**

THIS PROPERTY FALLS IN FLOOD ZONE "X" AS SHOWN
ON MAP NO. 25001C0611J DATED JULY 16, 2014

TO: RANDY C. ROSE III
ON THE BASIS OF MY KNOWLEDGE AND INFORMATION, I FIND, THAT AS A RESULT OF A SURVEY MADE ON THE GROUND TO THE NORMAL STANDARD OF CARE OF PROFESSIONAL LAND SURVEYORS PRACTICING IN THE COMMONWEALTH OF MASSACHUSETTS, THE LOCATION OF THE DWELLING IS AS SHOWN HEREON.

03/22/21 *Paul E. Sweetser*
DATE PROFESSIONAL LAND SURVEYOR

PLAN REFERENCE:
PL.BK.137 PG.81
D.BK.1340 PG.847
(LOT V8)
LOCUS ADDRESS:
44 PINE GROVE
RD.
WEST HARWICH

SCALE: 1"=30'
DATE DRAWN:
MARCH 22, 2021

FILE: 2738-00



PAUL E. SWEETSER
PROFESSIONAL LAND SURVEYOR
P.O. BOX 1146
DENNISPORT, MA 02639
(508)737-7560

FP-007C B
(Rev 01/15)

The Commonwealth of Massachusetts
Department of Fire Services - Office of the State Fire Marshal
P.O. Box 1025, State Road, Stow, MA 01775

CERTIFICATE OF COMPLIANCE
M.G.L. CHAPTER 148, SECTION 26F & 26F 1/2

Harwich

City or Town _____ Date: Feb 22, 2021

This Certifies that the property located at 44 Pine Grove Rd

Has been equipped with approved smoke detectors & carbon monoxide alarms* and was found to be in compliance with Massachusetts General Law chapter 148 Section 26F & 26F 1/2 and 527 CMR 1.00 Section 13.7.

Inspection/Testing completed on: 2-23-2021 By: [Signature] Inspector

Fee Paid: 50.00 #1049 Head of Fire Department: [Signature]

Note: This certificate EXPIRES sixty (60) days after date of issue.

SELLER'S COPY

HARWICH FIRE DEPARTMENT

No. 962

On Feb 22, 2021 (date) the property located at:

44 Pine Grove Rd
(describe location in detail)

Owner: Rose

Receipt of Payment Resale Inspection
Harwich Fire Department

#1049

Fee of \$ 50.00 pd.







V-B.

APRIL 20, 2021
BOARD OF HEALTH MEETING

To: Board of Health
From: Kathleen O'Neill, Health Director
Applicant: Christopher Garcia-Garcia, Galuska & DeSousa Consulting Engineers, Inc.
Address: 351 Pleasant Lake Avenue-Cape Cod Regional Technical High School

The Health Department has been notified that Garcia, Galuska & DeSousa Consulting Engineers, Inc., on behalf of the Cape Cod Technical Regional High School is applying for a variance from the Massachusetts Plumbing Code 248 CMR 10.10 (7) (c) 4. The request is for relief to building toilet facilities with 50% of the required water closet fixtures. They request that the proposed athletic field bathrooms be allowed to be constructed with a total 4 female water closets, 2 male water closets, 2 male urinals and 2 lavatories per sex.

Town of Harwich Plumbing Inspector is aware of the variance request and stated no objections.

I recommend approval of the variance request (please see suggested motion, Option #2, below).

SUGGESTED MOTIONS FOR BOARD CONSIDERATION

IF THE BOARD IS NOT READY TO VOTE, DO NOT CLOSE THE PUBLIC HEARING, BUT CONTINUE THE HEARING TO A DATE AND TIME CERTAIN (OPTION #1).

Option #1: Continuance If the Board will require additional information or wants to take the matter under advisement the following motion is recommended: Move to continue the hearing for 351 Pleasant Lake Avenue- Cape Cod Regional Technical High School, to no earlier than 7:00 pm on _____ (Next Meeting Date: May 18, 2021) for the following reason(s): Need to provide reasons for the continuance- additional information, take under advisement, etc.

IF THE BOARD IS READY TO CLOSE THE HEARING AND VOTE:

Option #2: Approve to support the request for a variance from the Massachusetts Plumbing Code 248 CMR 10.10 (7)(c)4 at 351 Pleasant Lake Avenue- Cape Cod Regional Technical High School.

Option #3: Move to deny to support the request for a variance from the Massachusetts Plumbing Code 248 CMR 10.10 (7)(c)4 at 351 Pleasant Lake Avenue- Cape Cod Regional Technical High School. The denial is based on the fact that the application does not meet the necessary requirements and criteria for approval pursuant to the Code of Town of Harwich, specifically: (Need to list or note which requirements/criteria are not being met).



GARCIA, GALUSKA & DeSOUSA
Consulting Engineers Inc.

375 Faunce Corner Road, Suite D
Dartmouth, Massachusetts 02747-1258
T: 508-998-5700 • F: 508-998-0883 • E: info@g-g-d.com



L#75514
J#864 003 00.00

April 1, 2021

Town of Harwich
Board of Health
732 Main Street
Harwich, MA 02645

Attn: Kathleen A. O'Neill, Sc. D., R.S.

Re: Cape Cod Regional Technical High School – Ballfield Bathroom Building
Harwich, MA

Dear Ms. O'Neill:

Please consider this our formal request for a pre-variance meeting review.

Our office has been retained by Drummey Rosane Anderson, Inc., of Waltham, MA, to prepare documents for the plumbing systems for the Cape Cod Regional Technical High School Ballfield Bathroom Building located at 351 Pleasant Lake Avenue, Harwich, MA.

The Cape Cod Regional Technical High School intends to construct a new multi-purpose athletic field with bleachers including a new Bathroom/Concessions building. The athletic field bleachers will have a capacity of 480 persons. We are applying for a variance to reduce the quantity of water closets required by the MA Uniform Plumbing Code by 50%. We are seeking relief from 248 CMR 10.10, Table 1: minimum Facilities for Building Occupancy.

Attached please find a copy of the variance application to the State Board of Examiners of Plumbers and Gas Fitters, proposed floor plan of the building, and site layout plan for your review.

If you have any questions or comments regarding the above, please contact our office at your earliest convenience. We thank you for your cooperation regarding this matter.

Very truly yours,

GARCIA • GALUSKA • DESOUSA
Consulting Engineers Inc.

Christopher M. Garcia, P.E.

CMG:jfm

Enc.

cc: Vladimir Lyubetsky, Drummey Rosane Anderson, Inc.



**Commonwealth of Massachusetts
Division of Professional Licensure
Board of State Board of Examiners of Plumbers and Gas Fitters
1000 Washington Street • Boston • Massachusetts • 02118-6100**

**VARIANCE FROM STATE PLUMBING CODE
PRE-INSTALLATION**

\$86.00 application fee payable to "Commonwealth of Massachusetts"

DO NOT USE THIS APPLICATION IF PLUMBING WORK HAS BEEN COMPLETED

PLEASE PRINT CLEARLY

(Section 1) APPLICANT INFORMATION:

Applicant Name: Christopher M. Garcia, P.E.		Firm Name (if applicable): Garcia, Galuska & DeSousa, Inc		Date: 4/1/2021
Title or Position with Firm (if applicable): Principal		Type of Work: New Construction: <input checked="" type="radio"/> Renovation: <input type="radio"/>		
Street Address: 375 Faunce Corner Road, Suite D		City/Town: Dartmouth	State: MA	Zip Code: 02748
Cell Phone: (508) 951-4339	Work Phone: (508) 998-5700	Email: chris_garcia@g-g-d.com		

ALL OF THE FOLLOWING ITEMS MUST BE INITIALED.

IF LEFT BLANK, THE FORM WILL BE DEEMED INCOMPLETE AND WILL NOT BE ACCEPTED.

1. I have included with this application written documentation that the local Board of Health has been petitioned regarding this variance request. * (Variance requests for City of Boston must include petition to Inspectional Services) Note: No Board of Health petition is required for buildings owned, used or leased by the State of Massachusetts.	INITIAL BELOW
2. I have included all necessary supporting documentation regarding this variance request.	INITIAL BELOW
3. I have included a non refundable check for \$86.00 payable to the Commonwealth of Massachusetts. Note: No payment is required for buildings owned, used or leased by the State of Massachusetts.	INITIAL BELOW
4. The unusual or extraordinary circumstance or established hardship that warrants special terms or conditions is clearly stated in (Section 5) on the second page of this application	INITIAL BELOW
5. I understand that this variance request is for one instance at the location information stated in (Section 3) of this application.	INITIAL BELOW
6. I certify that the plumbing work relevant to the information stated in (Section 5) has not yet been performed.	INITIAL BELOW

* "Additionally, any response by the Board of Health or Health Department must be provided, however, the Board may waive this requirement so long as the petition was made in a timely manner."

(Section 2) OWNER OF THE PROPERTY WHERE THE VARIANCE IS LOCATED: (Please leave blank if information is the same as in Section (1))

Individual Name:		Firm Name (if applicable): Cape Cod Regional Technical High School		
Street Address: 351 Pleasant Lake Avenue		City/Town: Harwich	State: MA	Zip Code:
Cell Phone:	Work Phone: (508) 432-4500	Email:		

(Section 3) LOCATION OF VARIANCE: (Please leave blank if this information is the same as in Section (2))

Name of proposed or current occupier of the building: Cape Cod Regional Technical High School		
Street Address: 351 Pleasant Lake Avenue	City/Town: Harwich	Zip Code: 02645

(Section 4) ADDITIONAL INFORMATION:

Plumber's Name (if available):	Plumbing Firm Name (if available): TBD	Work Phone:
Name of Plumbing Inspector: Tom Davis	Date Inspector was informed of this Variance Request: 4/1/2021	
Plumbing Code Section(s) Relevant to this Variance Request: 248 CMR 10.10 Table 1: Minimum Facilities for Building Occupancy		
Has Plumbing Work Begun at the Location of this Variance Request: Yes: <input type="radio"/> No: <input type="radio"/> Date Work Began:		

(Section 5) VARIANCE INFORMATION: (Please explain in detail the established hardship relative to this variance request)

The Cape Cod Regional Technical High School intends to construct a new multi-purpose athletic field with bleachers as part of the construction of the new Cape Cod regional Technical High School.

A building with public toilet rooms will be constructed adjacent to the proposed bleachers. The athletic field bleachers will have a capacity of 480 persons. Per Table 1, based on that occupancy, the following quantity of plumbing fixtures is required: 8 female water closets, 4 male water closets (50% urinals), and 2 lavatories per sex.

The school department asks for relief to building toilet facilities with 50% of the required water closet fixtures. We request the proposed athletic field bathrooms be allowed to be constructed with a total of 4 female water closets, 2 male water closets, 2 male urinals, and 2 lavatories per sex.

By checking this box - I hereby certify under pains and penalties of perjury that the information entered on this application request, including supporting documentation, is true and accurate and is filed in accordance with Chapter 142, section 13 of the General Laws and 248 CMR, the Massachusetts State Plumbing Code. I certify that all work performed prior to this request for a variance meets the requirements of 248 CMR and that I am only seeking a variance for work that has not yet commenced. I also certify that I understand that this is a request for the Board to allow an exception to the requirements of the Massachusetts State Plumbing Code and does not constitute an appeal of an inspector's decision.

Signature of Applicant _____ Date: _____

DRA

Drumsey
Roane
Addition, Inc.
260 Charles Street
Suite 300
Walham, MA 02453
617-964-1700

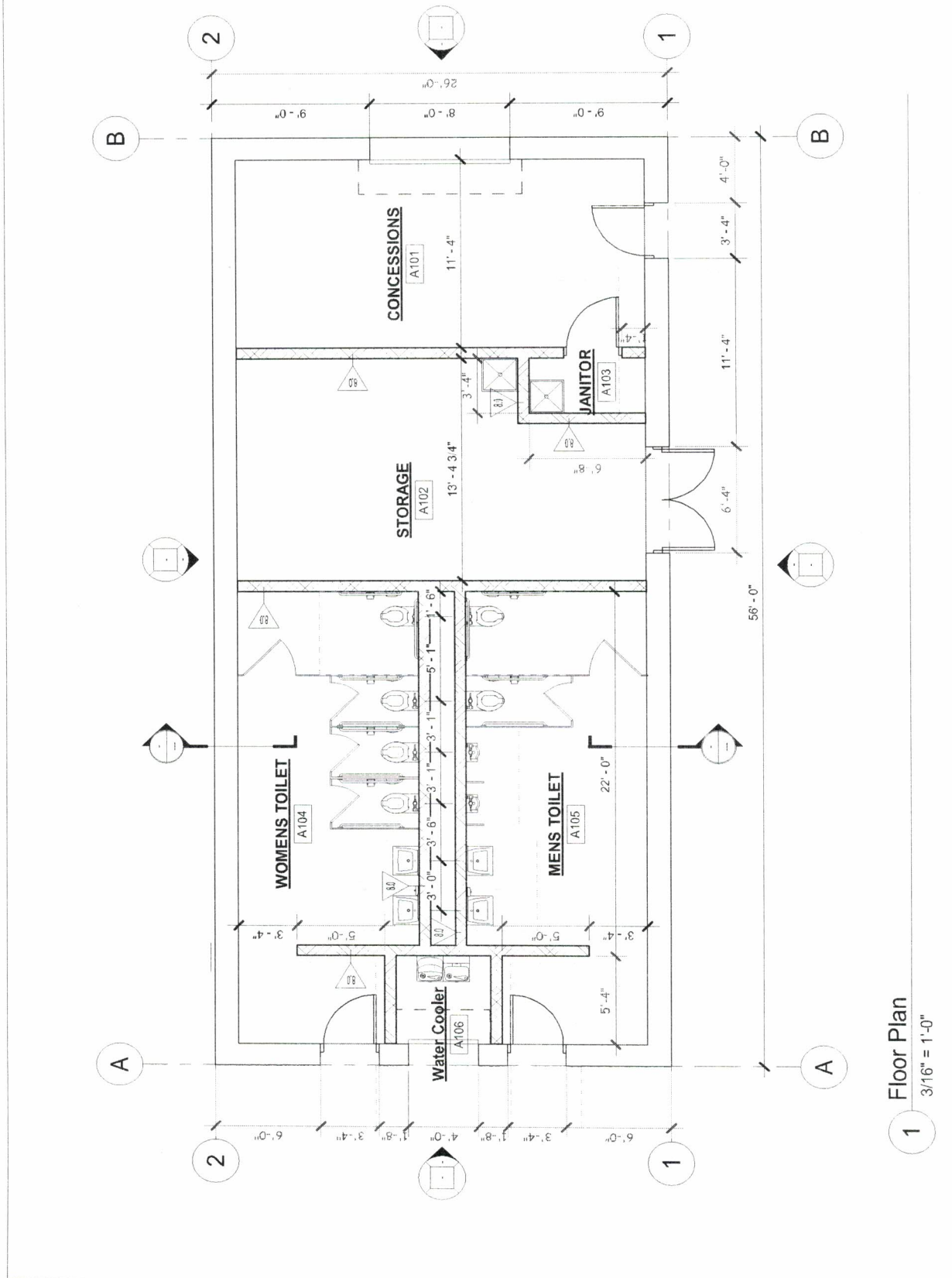
HARWICH, MASSACHUSETTS

CAPE COD REGIONAL TECHNICAL HIGH SCHOOL
ATHLETIC FACILITY IMPROVEMENTS
FIRST FLOOR PLAN

A101

REF. DWG. No.
DRA

PROJECT
SCALE 3/16" = 1'-0"
DATE



1 Floor Plan
3/16" = 1'-0"

DRA

1000 STATE STREET
SUITE 200
BOSTON, MA 02116
TEL: 617.552.1234
WWW.DRAINC.COM

Planning | Architecture | Interior Design

CAPE COD REGIONAL
TECHNICAL HIGH
SCHOOL

ATHLETIC FACILITY
IMPROVEMENTS

HARWICH,
MASSACHUSETTS



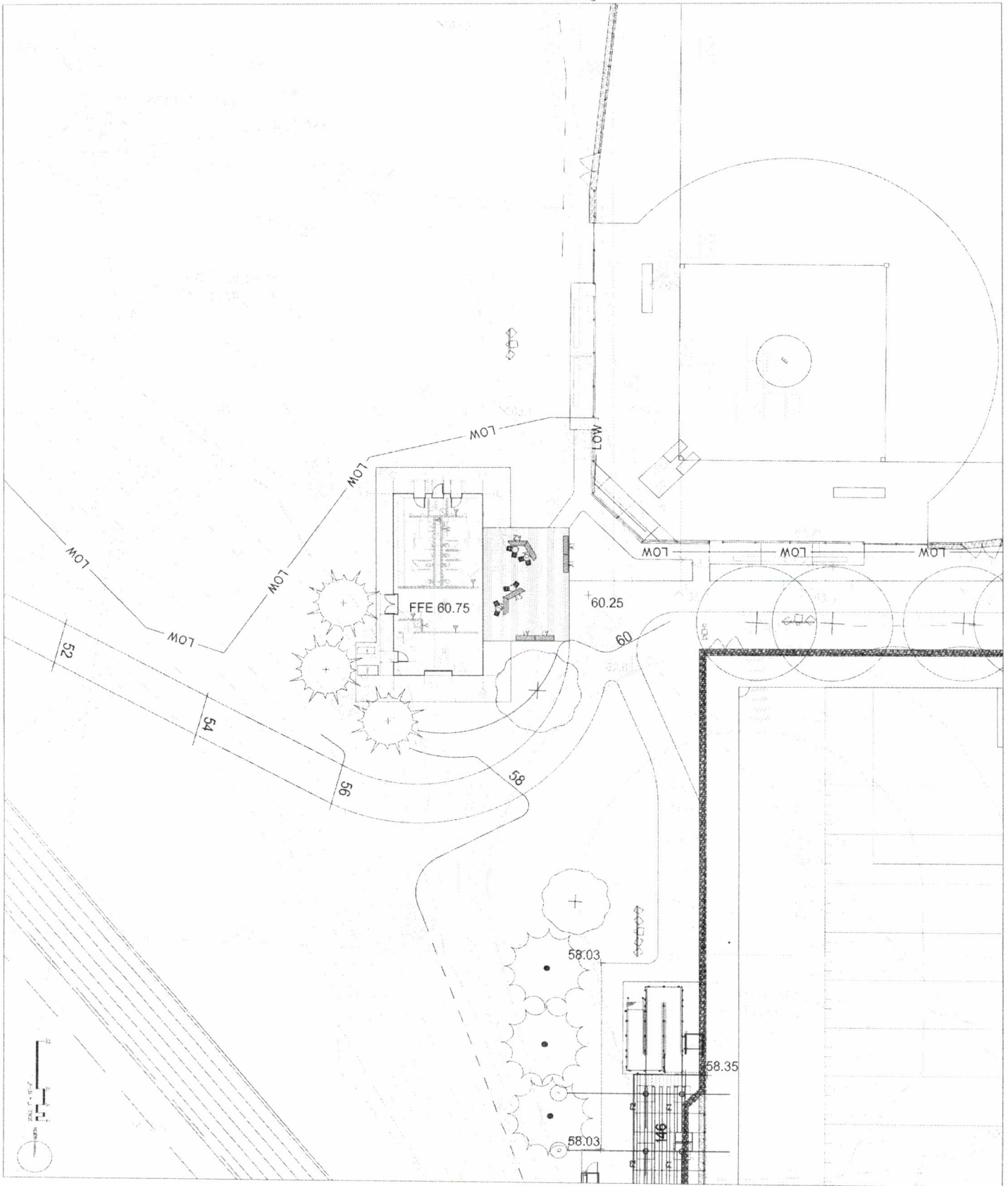
WARNER LARSON
LANDSCAPE ARCHITECTS

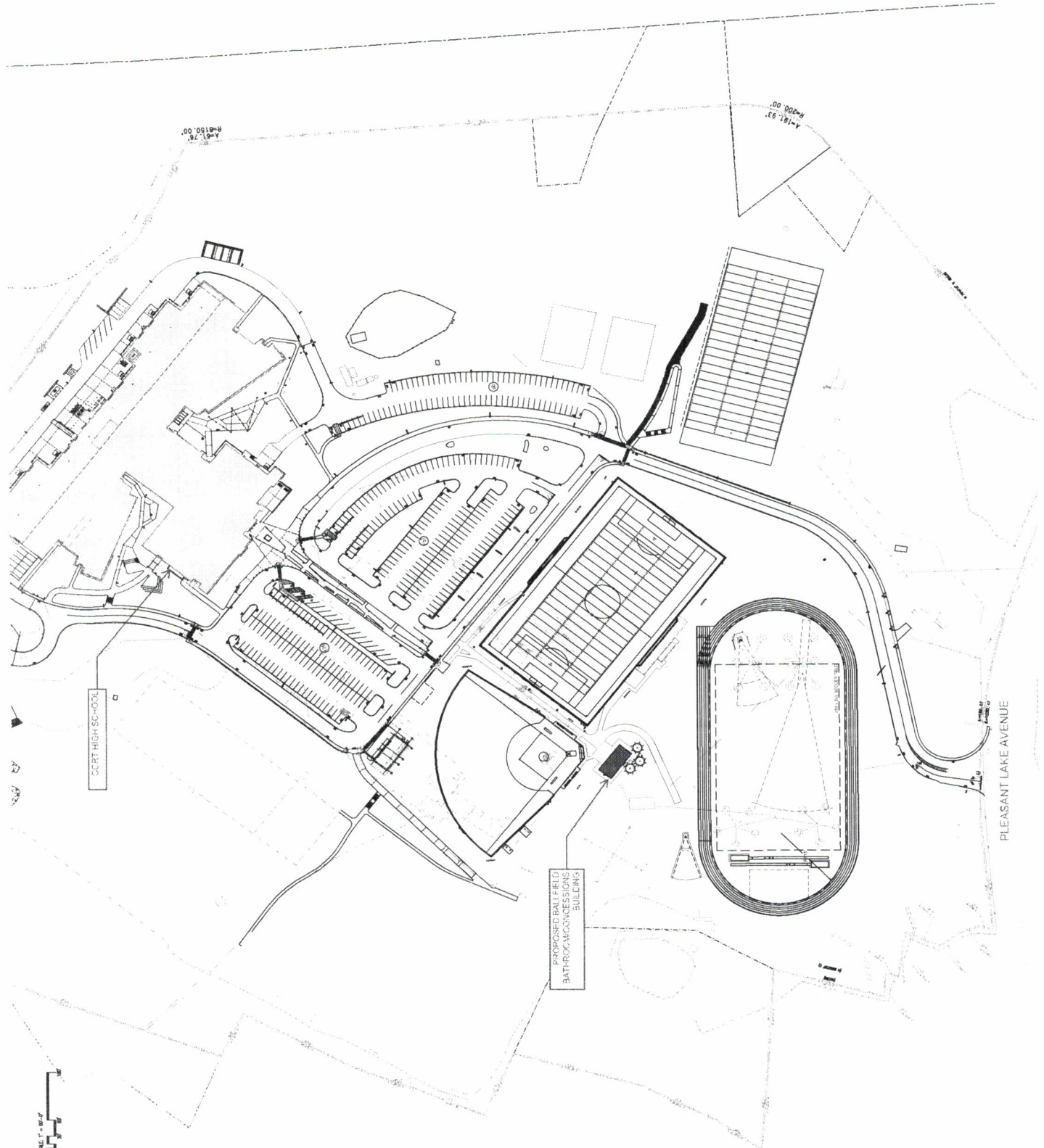
100 WEST BROADWAY, BOSTON, MA 02107
TEL: 617.452.1400
WWW.WARNERLARSON.COM

LANDSCAPE
PLAN

L401

Scale: 1"=20'-0"
Date: 11/11/11
Drawing No.: L401
Sheet No.: 1/1





R=6150.00'

R=181.93'

CCRT HIGH SCHOOL

PROPOSED BALL FIELD
BATHROOM/CONCESSIONS
BUILDING

PLEASANT LAKE AVENUE



ALL distribution (posting, land mail, or e-delivery, publication, and good faith efforts) must be completed on or before July 1st.

Instructions for customers to request a hard copy must also be included in e-delivery.

When a URL is used it must be a direct link to the document; no other clicks allowed.

E. Consumer Delivery Methods – Based on Population Served

For systems serving fewer than 500 persons:
(Choose #1 or #2)

Date of delivery/publication:

1. My system used one or more of the following methods to notify customers that their CCR would not be mailed directly to them but is available to them upon request. (the notice is attached)

- Land-mail Door-to-door Newspaper eMail Posted notices

Locations of posted notices

2. My system provided a CCR to each customer by the following method(s):

Published the full CCR in a local newspaper (the published report from newspaper is attached).

Land-mailed or hand-delivered the CCR to consumers.

e-Mailed with the CCR either embedded in the email or attached as a PDF. (e-mail is attached)

Posted the CCR on the web and sent the direct URL to customers by way of land-mail or email (notice/postcard is attached).

List URL

For systems serving 500 to 9,999 persons:
(Choose either #1 or #2)

Date of delivery/publication:

1. My system provided a copy of the CCR to each customer by:

- Land-mail e-Mail with PDF of CCR e-Mail with embedded CCR

Sent a notice (by land or e-mail) containing a direct URL to customers (copy is attached)

List the URL if used.

2. My system provided the CCR to each customer by publishing the full report in a newspaper (a copy of the published CCR is attached) and provided notice to consumers of this action by either:

- Published a notice of this in a local newspaper
 Land mailed a notice of this to consumers.
 e-Mailed a notice of this to consumers.

For systems serving 10,000 or more persons:

Date of delivery/publication:

My system provided a copy of the CCR to each customer by:

- Land mail e-Mail with PDF e-Mail with embedded CCR

Sent a notice (by land or e-mail) containing a direct URL to customers

HARWICHWATER.COM/CCR

List the URL if used.

For systems serving greater than 100,000 population: In addition to one of the delivery methods checked above, we have posted the CCR on a publicly accessible Internet site as required.

www.

List the URL used

F. Good Faith Delivery Methods (minimum of 3 is required for any sized systems)

Good Faith efforts are in addition to your primary method of delivery.

To reach people who drink our water but are not billed customers the following were conducted in addition to the required delivery:

Posted the CCR on a publicly accessible Internet site at the following address. (Only for systems under 100,000 population who did not use this method as their primary method)
www. HARWICHWATER.COM/CCR

List the URL used.

Mailed the CCR to all postal patrons within the service area (list of zip codes used is attached).

Mailed a postcard listing the URL where the CCR can be found, to all postal patrons within the service area (list of zip codes used is attached).

www.

List the URL used.

Advertised availability of the CCR in the following news media (the announcement is attach):

Radio Newspaper Television / cable Social media Digital signboard

Published the CCR in local newspaper (attach the published CCR).

Posted the CCR in public places i.e., post office, town hall, library (list of locations is attached).

Delivered multiple CCR copies to single-bill addresses serving several persons i.e., apartments, businesses, large private employers (list of locations is attached).

Delivered multiple CCR copies to community organizations (list of organizations is attached.)

Posted the CCR or a notice of availability at locations within the apartment/condo complex (list of the locations is attached).

Deliver CCR to new residents when they move in.

Other

G. Mandatory Agency Delivery Requirements

All systems must submit CCR to these three agencies

1. **Local Board of Health**

Deliver 1 copy of CCR and the Certification Form (Contact your board of health as to whether they would prefer hardcopy or e-delivery of CCR.)

04/02/2021

Date completed

2. **MA Dept. of Public Health**

Deliver 1-copy of CCR and the Certification Form

PDF emailed to: dph.ccr@massmail.state.ma.us

or

Hardcopy to: 250 Washington St.; Boston, MA 02108

04/02/2021

Date completed

Agencies and consumers must receive CCR on or before July 1.

3. **MassDEP Boston Office***

Deliver 1 copy of CCR, the Certification Form, and all needed attachments

PDF emailed to: Program.Director-DWP@state.ma.us.

Label it [PWSID-PWS Name-year-CCR]

or

Hardcopy to: MassDEP-CCR Program, 1 Winter St. -5th Fl., Boston, MA 02108

04/02/2021

Date completed

For e-delivery, scan documents into 1 PDF file. Make sure Cert Form is first with CCR following it.

*Because of COVID-19 restrictions, the preferred delivery method is email

--Do not send to MassDEP regional offices--
 Only Boston is accepting CCRs



2020 Consumer Confidence Report

Harwich Water Department - Harwich, Massachusetts
MassDEP Public Water System ID # 4126000

This report is a snapshot of the drinking water quality that we provided last year. Included are details about where your water comes from, what it contains, and how it compares to state and federal standards. We are committed to providing you with this information because informed customers are our best allies.

PUBLIC WATER SYSTEM INFORMATION

Address: 196 Chatham Road, Harwich, Massachusetts 02645

Contact Person: Daniel Pelletier, Superintendent

Telephone #: 508-432-0304

Email: dpelletier@harwichwater.com

Internet Address: www.harwichwater.com

Water System Improvements

Our water system is routinely inspected by the Massachusetts Department of Environmental Protection. MassDEP inspects our system for its technical, financial, and managerial capacity to provide safe drinking water to you. Your water system is operated by Massachusetts certified operators who oversee routine operations of our system. As part of our ongoing commitment, last year we made the following improvements to the system:

- Water Service Replacement Project along the National Grid Project Route began in 2019 and continued in to 2020. Eighty-seven old metal water services along the project route are being replaced with HDPE pipe from the water main to the curb stop. The project route includes Great Western, Queen Anne, Route 39, Main Street, Depot Street and Depot Road.
- Replaced 167 meters in 2020 as part of our ongoing meter replacement program. This was down from 402 meters in 2019 due to the pandemic and ensuring safety of our staff.
- Water Main Replacement on Harden Lane; 600 feet of 2"
- Pleasant Lake Tank Project to increase size of fill pipe began toward the end of 2020 and will continue into 2021

2020 Public Water Systems Awards

In December of 2020, the Harwich Water Department was recognized by the Senate, House of Representatives, and Massachusetts Department of Environmental Protection for Outstanding Performance and Achievement in the Medium and Large Community Water System Category in 2020.

Opportunities for Public Participation

If you would like to participate in discussions regarding your water quality, you may remotely attend (due to Covid-19) Board of Water/Wastewater Commissioners meetings on the first and third Thursday of each month at 1:00pm unless otherwise posted. Remote meeting Information can be found on harwichwater.com.

YOUR DRINKING WATER SOURCE

Where Does My Drinking Water Come From?

The large Monomoy ponds (Long, Seymour and Hinckley) receive groundwater discharge from the lens, which then feeds the Herring River so that groundwater ultimately discharges into Nantucket Sound. The Monomoy Lens is the second largest of the six mounds or cells of elevated groundwater that comprise the aquifer. The lens supplies generally excellent drinking water from its porous sand and gravel deposits. The water is considered "soft" due to the lack of calcium and magnesium. Municipal water supplies are treated to neutralize the pH. Naturally occurring iron and manganese can cause staining, odor and taste problems. Sodium chloride can be elevated in coastal areas due to salt spray or saltwater intrusion.

Harwich Water System

The Water Department operation consists of 14 pump stations, approximately 400 acres of well fields/watershed protection areas, 5 corrosion control facilities, 2 elevated and 1 ground-level water storage tanks and 2 new Greensand Water Treatment facilities which provide service to 10,034 metered accounts, 132 fire sprinkler accounts and 1,382 fire hydrants for fire protection. The original water system was established in 1936.

The drinking water supply for the Harwich comes from 14 gravel packed wells. Wellfields are in South, East and North Harwich, and draw water from the Monomoy Lens Aquifer. These 14 wells pumped 910 million gallons of water in 2020. The sand and gravel act as a huge underground reservoir, which is continually replenished by rainfall and snowmelt. The wells have a high susceptibility to contamination due to the absence of hydro geologic barriers (i.e. clay) that can prevent contaminant migration.

Source Name	MassDEP Source ID#	Source Type	Location of Source
Well 1	4126000-01G	Groundwater	off Chatham Road
Well 2	4126000-02G	Groundwater	off Chatham Road
Well 3	4126000-03G	Groundwater	off Chatham Road
Main Station Well 1	4126000-13G	Groundwater	off Chatham Road
Main Station Well 2	4126000-14G	Groundwater	off Chatham Road
Main Station Well 3	4126000-15G	Groundwater	off Chatham Road
Well 4	4126000-05G	Groundwater	off Chatham Road
Well 5	4126000-06G	Groundwater	off Depot Road
Well 6	4126000-07G	Groundwater	off Depot Road
Well 7	4126000-08G	Groundwater	off Depot Road
Well 8	4126000-09G	Groundwater	off Bay Road
Well 9	4126000-10G	Groundwater	off Bay Road

Is My Water Treated?

After the water is pumped from the ground, it is treated with the chemicals Potassium Hydroxide (KOH) and Sodium Hypochlorite (Chlorine). KOH is added at very low concentrations to increase the pH of the water and reduce its natural corrosivity. Low pH can stain plumbing fixtures and degrade the water quality by leaching copper and lead out of private services. The water treatment plants improve water quality by removing dissolved iron and manganese from the water supply.

What is My System's Ranking?

MassDEP has prepared a Source Water Assessment Program (SWAP) Report for the water supply source(s) serving Harwich. The SWAP Report assesses the susceptibility of public water supplies. Since there are a number of land uses and activities that are potential sources of contamination, Harwich has a high susceptibility ranking. SWAP notes the following key issues for our sources; inappropriate activities in Zone I areas, residential land uses and activities, storm water pollution, transmission line right-of-way, and transportation corridor within Zone IIs, and comprehensive wellhead protection planning for Zone IIs.

Where Can I See The SWAP Report?

The complete SWAP report is available at the Water Department and online at <https://www.mass.gov/service-details/the-source-water-assessment-protection-swap-program>. For more information, call 508-432-0304

What Can Be Done to Improve Protection?

Residents and business owners can help protect sources by:

- Practice good septic system maintenance
- Support water supply protection initiatives
- Take hazardous household chemicals to hazardous materials collection days
- Limiting pesticide and fertilizer use:

Nitrogen and Phosphorus in fertilizer are the greatest concern to water quality. Generally speaking, lawns need less fertilizer than advertised and there are multitudes of fertilizing alternatives available today. While water quality in Harwich is excellent, let's do our best to keep it that way and protect our precious resource.

SUBSTANCES FOUND IN TAP WATER

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals, and in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity. Contaminants that may be present in source water include:

- **Microbial contaminants**, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- **Inorganic contaminants**, such as salts and metals, which can be naturally occurring or result from urban stormwater runoff, industrial, or domestic wastewater discharges, oil and gas production, mining, and farming.
- **Pesticides and herbicides**, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.
- **Organic chemical contaminants**, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems.
- **Radioactive contaminants**, which can be naturally occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, the Environmental Protection Agency (EPA) and MassDEP prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. The FDA and Massachusetts Department of Public Health regulations establish limits for contaminants in bottled water that must provide the same protection for public health.

All drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline (800-426-4791).

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and some infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. Harwich Water is responsible for providing high quality drinking water but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at <http://www.epa.gov/safewater/lead>.

IMPORTANT DEFINITIONS

Maximum Contaminant Level (MCL): The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

Maximum Contaminant Level Goal (MCLG): The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

Action Level (AL): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.

90th Percentile: Out of every 10 homes sampled, 9 were at or below this level. This number is compared to the action level to determine lead and copper compliance.

Secondary Maximum Contaminant Level (SMCL): These standards are developed to protect the aesthetic qualities of drinking water and are not health based.

Unregulated Contaminants: Unregulated contaminants are those for which EPA has not established drinking water standards. The purpose of unregulated monitoring is to assist EPA in determining their occurrence in drinking water and whether future regulation is warranted.

Massachusetts Office of Research and Standards Guideline (ORSG): This is the concentration of a chemical in drinking water at or below which adverse health effects are unlikely to occur after chronic (lifetime) exposure. If exceeded, it serves as an indicator of the potential need for further action.

Treatment Technique (TT): A required process intended to reduce the level of a contaminant in drinking water.

Running Annual Average (RAA): The average of four consecutive quarters of data.

Maximum Residual Disinfectant Level (MRDL): The highest level of a disinfectant (chlorine, chloramines, chlorine dioxide) allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

Maximum Residual Disinfectant Level Goal (MRDLG): The level of a drinking water disinfectant (chlorine, chloramines, chlorine dioxide) below which there is no known expected risk to health. MRDLG's do not reflect the benefits of the use of disinfectants to control microbial contaminants.

- ppm = parts per million, or milligrams per liter (mg/L)
- ppb = parts per billion, or micrograms per liter (µg/L)
- ppt = parts per trillion, or nanograms per liter (ng/L)
- pCi/l = picocuries per liter (a measure of radioactivity)
- NTU = Nephelometric Turbidity Units
- ND = Not Detected
- N/A = Not Applicable
- C.U. = Color Units

WATER QUALITY TESTING RESULTS

What Does This Data Represent?

The water quality information presented in the table is from the most recent round of testing done in accordance with the regulations. All data shown was collected during the last calendar year unless otherwise noted in the table.

Regulated Contaminants							
Lead and Copper							
	Date(s) Collected	90 th percentile	Action Level	MCLG	# of sites sampled	# of sites above Action Level	Possible Sources
Lead (ppb)	8/1/2018 8/8/2018 8/21/18	1.7	15	0	34	0	Corrosion of household plumbing systems; Erosion of natural deposits
Copper (ppm)	8/1/2018 8/8/2018 8/21/18	0.29	1.3	0	34	0	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
Inorganic Contaminants							
Contaminant	Date(s) Collected	Highest Result	Range Detected	MCL	MCLG	Violation (Y/N)	Possible Sources
Barium (ppm)	3/12/2020	.0.12	ND-0.12	2	2	N	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits

Nitrate (ppm)	3/12/2020	2.8	ND – 2.8	10	10	N	Runoff from fertilizer use; leaching from septic tanks; sewage; erosion of natural deposits
Nitrite (ppm)	3/12/2020 3/23/2020	0.30	ND – 0.30	1	1	N	Runoff from fertilizer use; leaching from septic tanks; sewage; erosion of natural deposits
Perchlorate (ppb)	8/17/2020	ND	ND	2	N/A	N	Rocket propellants, fireworks, munitions, flares, blasting agents
Volatile Organic Contaminants							
Contaminant	Date(s) Collected	Highest Result	Range Detected	MCL	MCLG	Violation (Y/N)	Possible Sources
Xylenes (ppm)	3/12/2020 3/23/2020 6/10/2020 8/18/2020 11/4/2020	0.00058	ND – 0.00058	10	10	N	Discharge from petroleum factories; Discharge from chemical factories
Some people who drink water containing xylenes in excess of the MCL over many years could experience damage to their nervous system.							
Microbiological Contaminants							
Bacteria	Date(s) Collected	Highest % positive in a month	Total # Positive	MCL / TT	MCLG	Violation (Y/N)	Possible Sources
Total Coliform Bacteria	Weekly	0%	0	5%	0	N	Human and animal fecal waste
Fecal Coliform or E.coli	Weekly	0%	0	*	0	N	Human and animal fecal waste
*Compliance with fecal coliform/E.coli MCL is determined upon additional repeat testing							
Radioactive Contaminants							
Contaminant (Units)	Date	Highest Result	Range	MCL	MCLG	Violation	Possible Sources
Gross Alpha (pCi/l)	7/26/2012	1.4	0.13-1.4	15	0	N	Erosion of natural deposits
Radium 226 & 228 (pCi/L) (combined values)	7/26/2012	0.85	0.03-0.86	5	0	N	Erosion of natural deposits
If the results of these samples had been above 5 pCi/L, our water system would have been required to do additional testing for radium. Because the results were below 5 pCi/L, no testing for radium was required.							
Disinfectants and Disinfection By-Products							
Contaminant (Units)	Date(s) Collected	Highest Quarterly Running Annual Average	Range Detected	MCL	MRDLG	Violation (Y/N)	Possible Source(s) of Contamination
Chlorine (Free) (ppm)	Monthly in 2020	0.31	0.02-0.90	4	4	N	Water additive used to control microbes
Total Trihalomethanes (TTHM) (ppb)	8/18/2020	4.92	0.76 – 6.7	80	---	N	Byproduct of drinking water chlorination
Total Haloacetic Acids (HAA5) (ppb)	8/18/2020	0.80	0.00– 2.2	60	---	N	Byproduct of drinking water disinfection

Unregulated contaminants are those for which there are no established drinking water standards. The purpose of unregulated contaminant monitoring is to assist regulatory agencies in determining their occurrence in drinking water and whether future regulation is warranted.

Unregulated Contaminants						
Unregulated Contaminants	Date(s) Collected	Result or Range Detected	Average Detected	SMCL	ORSG	Possible Source
Chloroform (ppb)	3/12/2020 3/23/2020 6/10/2020 8/18/2020 11/4/2020	ND – 3.6	1.10	N/A	70	By-product of drinking water chlorination (In non-chlorinated sources it may be naturally occurring)
Chlorodibromomethane (ppb)		ND – 2.0	0.09	†	N/A	Trihalomethane; by-product of drinking water chlorination
Bromoform (ppb)		ND - 0.78	0.03	†	-	Trihalomethane; by- product of drinking water chlorination
Bromodichloromthane		ND – 1.4	0.06	†	-	Trihalomethane; by-product of drinking water chlorination
Manganese (ppb)*	6/10/2020 8/17/2020	ND – 10	ND	50	300	Erosion of natural deposits
* US EPA has established a lifetime health advisory (HA) value of 300 ppb for manganese to protect against concerns of potential neurological effects, and a one-day and 10-day HA of 1000 ppb for acute exposure.						
Methyl tertiary butyl ether* or MTBE (ppb)	3/12/2020 3/23/2020 6/10/2020 8/18/2020 11/4/2020	ND – 0.78	0.06	-	70	Discharge from use as a production and extraction solvent
*EPA has established a lifetime Health Advisory (HA) of 0.3 mg/L and an acute HA at 1.0 mg/L						
Nickel (ppb)	3/8/2018 5/16/2018 8/15/2018 8/22/2018 12/10/2018 3/12/2020	ND - 1.1	0.22	N/A	100	Discharge from domestic wastewater, landfills, and mining and smelting operations
Some people who drink water containing nickel at high concentrations for many years could experience effects on the lung, stomach, blood, liver, kidneys, immune system, reproduction, and development.						
Sodium (ppm)	3/12/2020	22	----	N/A	20	Discharge from the use and improper storage of sodium-containing de-icing compounds or in water-softening agents
Per- and polyfluoroalkyl substances (PFAS)*						
Unregulated Contaminant (CASRN)	Date Collected	Detect Result or Range	Average	ORSG	Possible Sources	Health Effects
Perfluorodecanoic acid (PFDA) 335-76-2 (ppt)	7/3/2019 10/15/2019	ND	ND	20	Discharges and emissions from industrial and manufacturing sources associated with the production or use of these PFAS, including production of moisture and oil resistant coatings on fabrics and other materials. Additional sources include the use and disposal of products containing these PFAS, such as fire-fighting foams.	Some people who drink water containing these PFAS in excess of the ORSG may experience certain adverse effects. These could include effects on the liver, blood, immune system, thyroid, and fetal development. These PFAS may also elevate the risk of certain cancers.
Perfluoroheptanoic acid (PFHpA) 375-85-9 (ppt)	7/3/2019 10/15/2019	ND	ND	20		
Perfluorohexanesulfonic acid (PFHxS) 355-46-4 (ppt)	7/3/2019 10/15/2019	ND	ND	20		
Perfluorononanoic acid (PFNA) 375-95-1 (ppt)	7/3/2019 10/15/2019	ND	ND	20		
Perfluorooctanesulfonic acid (PFOS) 1763-23-1 (ppt)	7/3/2019 10/15/2019	ND	ND	20		
Perfluorooctanoic acid (PFOA) 335-67-1 (ppt)	7/3/2019 10/15/2019	ND	ND	20		
The six compounds listed above were unregulated chemicals in 2020 between January 1 – October 2, 2020 and had an ORSG of 20 ppt. After October 2, 2020 it became regulated with an MCL of 20 ppt and any detects found at that time would be reported in the regulated table above.						

Unregulated Contaminant (CASRN)	Date Collected	Detect Result or Range	Average	ORSG	Possible Sources	Health Effects
Perfluorobutanesulfonic acid (PFBS) 375-73-5 (ppt)	7/3/2019 10/15/2019	ND	ND	†	-	-
Perfluorohexanoic acid (PFHxA) 307-24-4 (ppt)	7/3/2019 10/15/2019	ND	ND	†	-	-
Perfluorododecanoic acid (PFDoA) 307-55-1 (ppt)	7/3/2019 10/15/2019	ND	ND	†	-	-
Perfluorotetradecanoic acid (PFTeDA) 376-06-7 (ppt)	7/3/2019 10/15/2019	ND	ND	†	-	-
Perfluorotridecanoic acid (PFTTrDA) 72629-94-8 (ppt)	7/3/2019 10/15/2019	ND	ND	†	-	-
Perfluoroundecanoic acid (PFUnA) 2058-94-8 (ppt)	7/3/2019 10/15/2019	ND	ND	†	-	-

*In October 2020 PFAS6 was regulated with a maximum contaminant (MCL) of 20 parts per trillion(ppt). PFAS6 are comprised of six compounds: perfluorooctane sulfonic acid (PFOS), perfluorooctanoic acid (PFOA), perfluorohexane sulfonic acid (PFHxS), perfluorononanoic acid (PFNA), perfluoroheptanoic acid (PFHpA), and perfluorodecanoic acid (PFDA). Because PFAS samples in Harwich were collected before the regulation was established results are reflected in the Unregulated Contaminant section of this report.

†There is no ORS Guideline for this compound.

Unregulated Contaminant Monitoring Rule 4

Contaminant	Year Sampled	Highest Level Detected	Range Detected	
Bromide	2019	56.8	38.0-56.8	UCMR4 Rule: Unregulated contaminants are those that don't yet have drinking water standard set by the US Environmental Protection Agency. The purpose of monitoring for these contaminants is to help US EPA decide whether the contaminants should have a standard.
HAA5 (ppb)	2019	6.074	3.902-6.074	
HAA6Br (ppb)	2019	4.416	1.917-4.416	
HAA9 (ppb)	2019	8.51	4.829-8.51	
Manganese	2019	14.7	0.458-14.7	

As required by US Environmental Protection Agency (EPA), our water system has sampled for a series of unregulated contaminants. Unregulated contaminants are those that don't yet have a drinking water standard set by EPA. The purpose of monitoring for these contaminants is to help EPA decide whether the contaminants should have a public health protection standard.

What should I do?

You do not have to do anything but as our customers you have a right to know that these data are available. You may share this information with other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, food establishments, medical facilities and businesses).

For more information

For additional information on your water and the unregulated contaminants we sampled for, see your water department's Consumer Confidence Report (CCR), or called a water quality report, delivered by your water department by July 1 of each year. If you have any questions about your CCR, see the contact information below for your water department. For information on the Unregulated Contaminant Monitoring Program, visit the MassDEP website (<http://www.mass.gov/eea/agencies/massdep/water/drinking/water-systems-ops.html>) and navigate to Unregulated Contaminant Monitoring Program.

If you want to speak with someone at the water department about the results, please contact Dan Pelletier at (508) 432-0304 or dpelletier@harwichwater.com

COMPLIANCE WITH DRINKING WATER REGS

Does My Drinking Water Meet Current Health Standards?

Harwich Water is committed to providing you with the best water quality available. We are proud to report that last year your drinking water met all required water quality standards regulated by the state and federal government.

EDUCATIONAL INFORMATION

Cross-Connection Control and Backflow Prevention

Harwich Water makes every effort to ensure that the water delivered to you is clean, safe and free of contamination. Our staff works very hard to protect the quality of the water delivered to our customers. But what happens when the water reaches your home or business? Is there still a need to protect the water quality from contamination caused by a cross-connection? If so, how?

What is a cross-connection?

A cross-connection occurs whenever the drinking water supply is or could be in contact with potential sources of pollution or contamination. Cross-connections exist in piping arrangements or equipment that allows the drinking water to come in contact with non-potable liquids, solids, or gases (hazardous to humans) in event of a backflow.

What is a backflow?

Backflow is the undesired reverse of the water flow in the drinking water distribution lines. This backward flow of water can occur when the pressure created by equipment or a system such as a boiler or air-conditioning is higher than the water pressure inside the water distribution line (back pressure), or when the pressure in the distribution line drops due to routine occurrences such as water main breaks or heavy water demand causing the water to flow backward inside the water distribution system (back siphonage). Backflow is a problem that many water consumers are unaware of, a problem that each and every water customer has a responsibility to help prevent.



What can I do to help prevent a cross-connection?

Without the proper protection something as simple as a garden hose has the potential to contaminate or pollute the drinking water lines in your house. In fact, over half of the country's cross-connection incidents involve unprotected garden hoses. There are very simple steps that you as a drinking water user can take to prevent such hazards, they are:

- NEVER submerge a hose in soapy water buckets, pet watering containers, pool, tubs, sinks, drains, or chemicals.
- NEVER attach a hose to a garden sprayer without the proper backflow preventer.
- Buy and install a hose bib vacuum breaker in any threaded water fixture. The installation can be as easy as attaching a garden hose to a spigot. This inexpensive device is available at most hardware stores and home-improvement centers.
- Identify and be aware of potential cross-connections to your water line.
- Buy appliances and equipment with backflow preventers.
- Buy and install backflow prevention devices or assemblies for all high and moderate hazard connections.

If you are the owner or manager of a property that is being used as a commercial, industrial, or institutional facility you must have your property's plumbing system surveyed for cross-connection by your water purveyor. If your property has NOT been surveyed for cross-connection, contact your water department to schedule a cross-connection survey. For more information on our cross-connection program, visit www.harwichwater.com

Conservation and Leak Detection

Water conservation and leak detection reduces the need for developing new water sources and storage facilities and helps to save our precious resource. Here are suggestions that will help you to conserve water and save money:

Indoor

- Turn off the water while you shave or brush your teeth
- Check your toilets for leaks by placing a few drops of food coloring in the tank. If the color shows in the bowl after 30 minutes without flushing, it has a leak
- Fix leaking faucets, pipes, toilets, etc.; a slow drip can waste over 100 gallons a day
- Keep showers under 5 minutes
- Run your washing machine and dishwasher only when they are full
- Consider installing low-flow faucets, toilets, and showerheads
- Replace old dishwashers and clothes washers with energy efficient machines that use less water

Outdoor

- Minimize evaporation by watering before 6 a.m. or after 6 p.m.
- Install a rain sensor shut-off device on your automatic sprinkler system.
- Consider installing a rain barrel to water your garden plants
- Use a layer of organic mulch around trees and plants to reduce evaporation and weed growth.
- Consider planting drought resistant plants and grass to reduce the need of watering.
- Use a broom instead of a hose to clean your driveway or sidewalk.
- Adjust your mower to a higher setting. Longer grass improves root systems and holds soil moisture

Drought Management During Peak Season

The Water Department has drought management signs throughout the Harwich Community. During peak season please refer to the signs around town as well as notices on our website for drought notification. We continue to encourage our customers to be diligent in conserving water even if the supply is abundant. It is important to keep in mind that the average person uses 80-100 gallons of water per day on the following activities:

Bathing & Hygiene	15 gallons per day	Kitchen	7 gallons per day
Housekeeping	1 gallon per day	Laundry	8 gallons per day
Irrigation/Watering	70 gallons per day	Toilet	19 gallons per day

To review your metered water bill, divide your water usage by the number of days in the billing period (approximately 90 days) and by the number of residents of your household to determine your average.

Things to look for in your lawn maintenance company

- Do they test your soil? This test will indicate the amount of fertilizer needed. The soil test will also indicate the need for lime, which can act as the gatekeeper of soil nutrients.
- Do they use a minimum 20% slow-release nitrogen fertilizer product?
- Do they apply no more than the maximum allowable amounts of nitrogen and phosphorus?
- Do they use a deflector shield on all broadcast fertilizer spreaders?
- Do they promote the benefits of a low maintenance zone around water bodies?
- Do they maintain a 100' fertilizer-free zone about water bodies and wetland?
- Do they observe the ban on applying nitrogen and phosphorus from November 15 through April 15?

The complete Harwich Regulation is available on the Town of Harwich website:

<https://www.harwich-ma.gov/health/pages/town-of-harwich-fertilizer-and-nutrient-control-regulation>

Copies can also be obtained by emailing or calling the Health Department

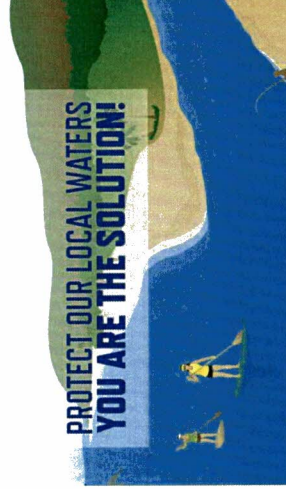
Harwich Health Department

732 Main Street

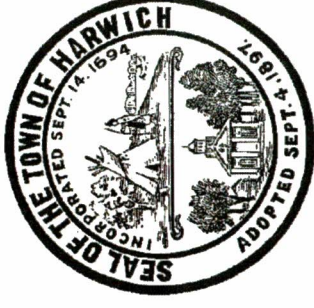
Harwich, MA 02645

508-430-7509

health@town.harwich.ma.us



Town of Harwich



Fertilizer and Nutrient Control Regulation

Effective January 22, 2021

Fertilizer Regulation

The Harwich Board of Health's Regulation on Fertilizer and Nutrient Control was adopted by the Board of Health and took effect on January 22, 2021.

Highlights include:

- The application of fertilizer containing nitrogen is prohibited between November 15 and April 15 unless specifically permitted by the enforcement authority.
- Nitrogen and phosphorus from any fertilizer application shall not be applied to or otherwise be deposited on any impervious surface.
- Fertilizer shall not be applied within 24 hours before or during a heavy rain event.
- An application of fertilizer should be watered in with no more than 0.25 inch of irrigation or natural rain within the 24 hour period following application.
- Fertilizer shall not be applied closer than 100' to any water body or within the Zone I of a public drinking well.

Purpose

- To ensure application of fertilizer shall be performed in a manner consistent with best management practices, which from time to time may undergo changes in response to scientific research.
- To provide a legal mechanism for enforcement against inappropriate and/or improper use of fertilizer.
- To incorporate the UMASS Extensions Turf Management best management practices as the primary standard for the content and application practices related to turf fertilizer.
- To provide a regulatory tool that will help Harwich to achieve compliance with the total daily maximum loads for the Town's water resources prescribed by the Commonwealth of Massachusetts.
- To provide the standards that will allow reasonable use of fertilizers for the enhancement and maintenance of turf quality.

Applicability

- This regulation allows for a reduction of nitrogen and phosphorus going into the Town's waters and wetlands by means of an organized system of education, standardization and regulation of practice.
- This regulation shall apply to and regulate any and all application of nitrogen and phosphorus through fertilizer within the Town of Harwich.
- Applications of fertilizer for agriculture and horticulture uses are exempt from the provision of this regulation as they are regulated by the MDAR Fertilizer Regulations.
- Whoever violates any provision of this regulation may be penalized by a noncriminal disposition process as outlined in the Regulation. A fine of up to \$300/day for each day of the violation is possible.

