

'Flu season, wherefore art thou?

"It is looking increasingly like the U.S. may not experience a flu season this year. **To date, fewer than 1,600 people in the entire country have tested positive for influenza since the 2020-2021 flu monitoring period began last October**; of those, 32 were recorded in the week ending Feb. 27. Most flu seasons, somewhere between 100 and 200 children die from flu; so far this season there has been a single pediatric flu death. **Experts believe mask wearing, social distancing, and enhanced hand hygiene practices adopted for Covid-19 control are contributing to the low numbers of circulating flu viruses.** The phenomenon isn't unique to the United States. In the same week ending Feb. 27, **Canada** reported zero positive flu tests, and a single person had the flu in **Britain** out of 5,787 samples tested." (Source: StatNews.com)

SUMMARY:

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

Barnstable County: 33 new cases

Martha's Vineyard:

0 new cases

Nantucket: 0 new cases

2. **Hospitalizations and Fatalities:** 3-day avg. hospitalizations have increased to **19** and appear to be showing a slight trend upwards (they were in the mid-60s in January during the post-holiday surge). ICU patient numbers have increased to **5** patients (in CCH). There were **3 COVID fatalities** reported yesterday. CCH and Falmouth Hospital have re-opened to limited visitation.

Last week 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 3/2/21):

Barnstable County: 3.09% (no change vs. previous fortnight)

Dukes & Nantucket Counties: 1.35% (lower)

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/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.**

-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 will become eligible for vaccination.**

-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.**

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>.

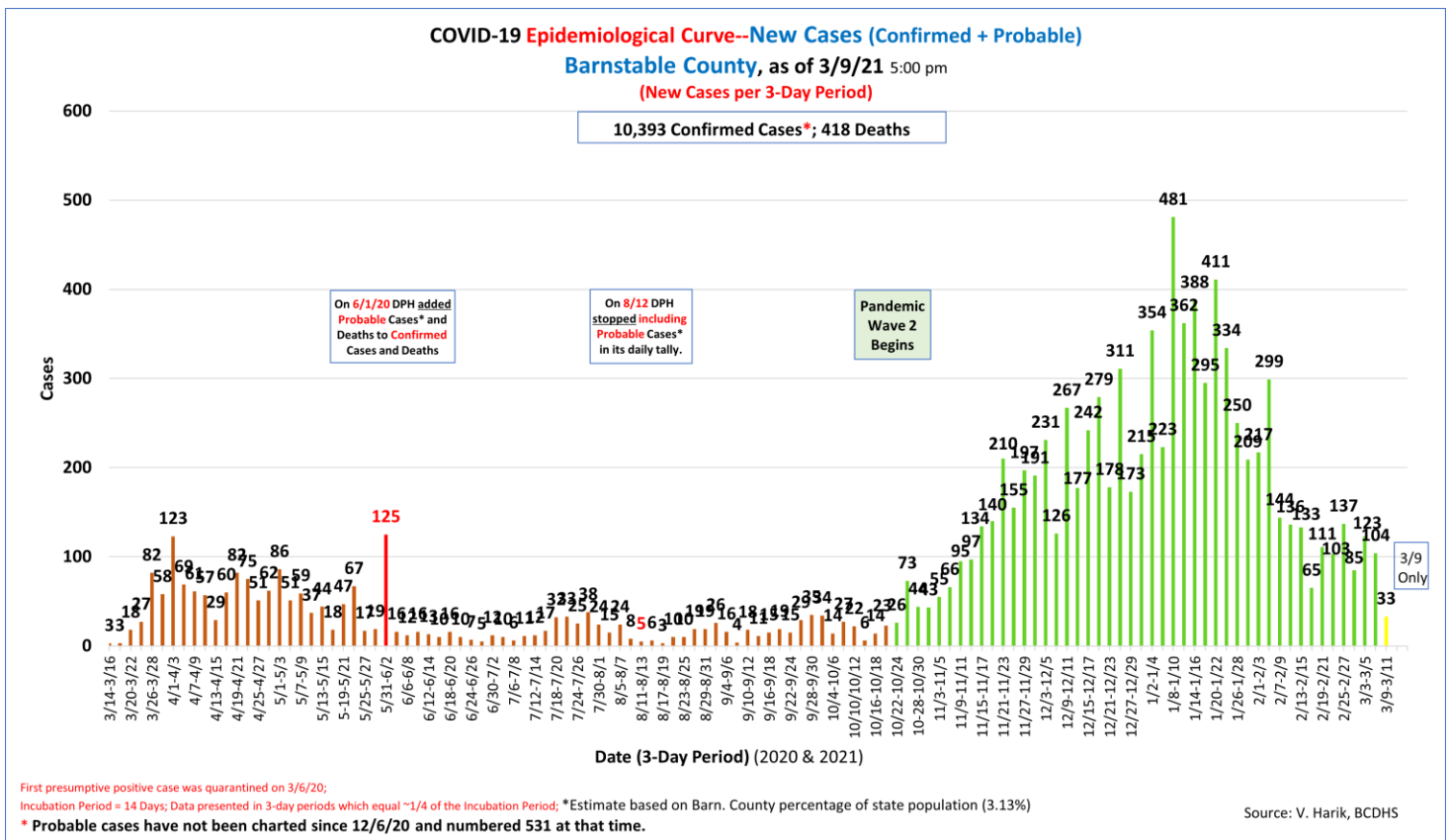
Existing vaccines may be less effective against these new strains. The degree to which this may be so is being investigated. Moderna and Pfizer are working on a booster shot to counter these new strains.

-B117 and B1351 have been identified in Massachusetts.

DETAIL:

1. New Cases

Daily new case numbers in Barnstable County remain stable following a major decline since the holiday season surge. **33** cases were reported yesterday. The 7-day average new cases per 100,000 is **17/100K**, with Barnstable County acquiring an **average of 37 cases per day over the past 7 days.**



Nantucket's 7-day average cases per 100,000 population (now 32/100K) has more than doubled in the past week. On average (7-day) Nantucket is now picking up **4** new cases per day. **0** new cases were reported yesterday.

Martha's Vineyard's 7-day average cases per 100,000 population (11/100K) remains lower. On average Dukes County is gaining approximately **2** new cases per day. **0** 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 3/2/21):

- Barnstable County: 3.09% (no change vs. previous fortnight)
- Dukes & Nantucket Counties: 1.35% (lower)

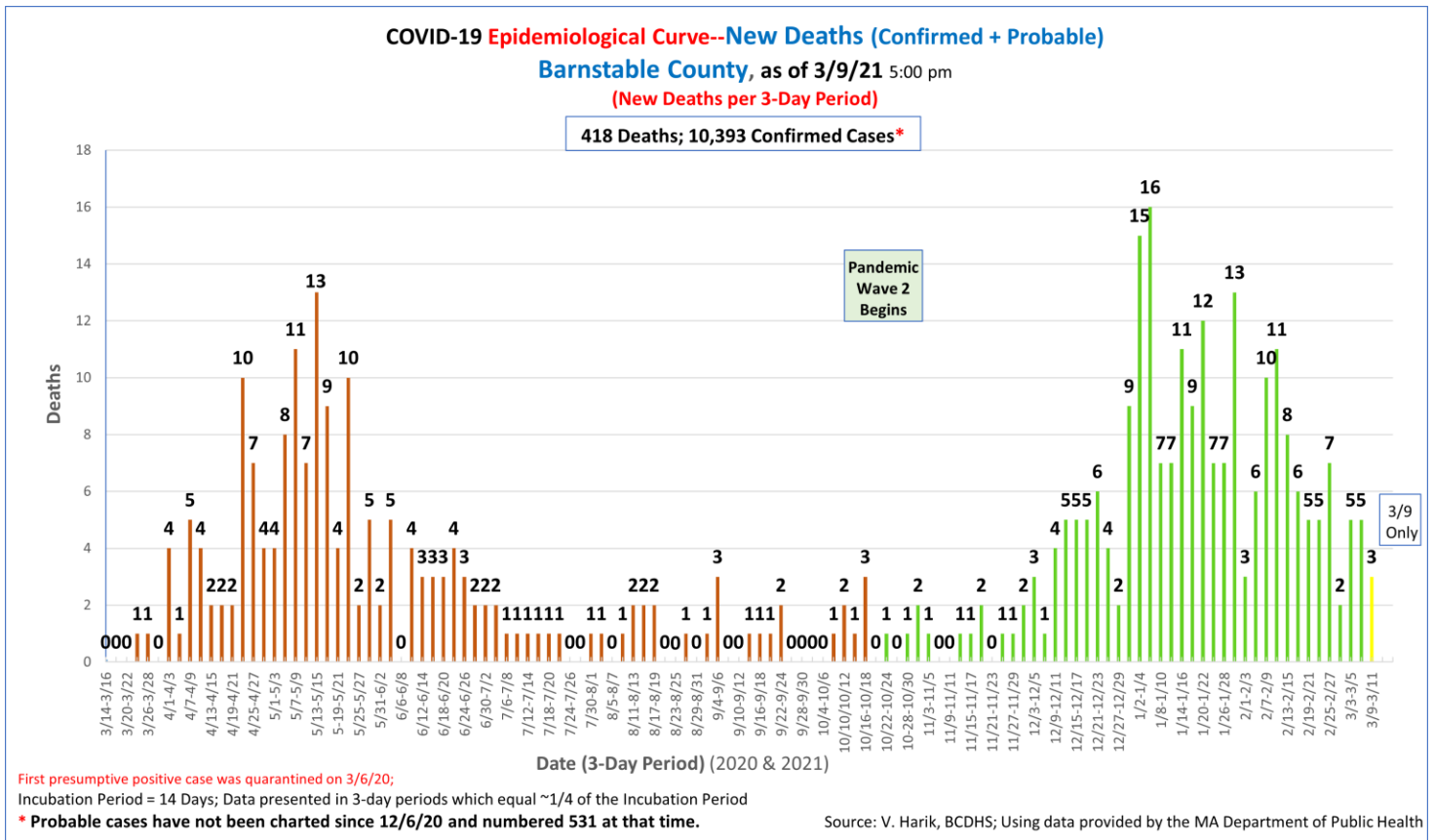
2. Hospitalizations and Fatalities

Hospitalizations and acuity of illness have decreased very significantly since the double peaks of the Wave 2 surge seen in min-January and early February (corresponding Thanksgiving and Christmas holidays). Cape Cod Hospital and Falmouth Hospital have **resumed limited visitation** of inpatients. **Non-essential surgeries and other elective procedures remain halted.**

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		
3/9/2021	Cape Cod Hospital	12	5	10,393	418	19.0	25%
	Falmouth Hospital	3	0				
		15	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 evening CCHC reported that there were **20 COVID patients in hospital**, 5 of which were in the CCH ICU.

Fatalities: 3 more fatalities were reported yesterday. The total is now **418**.



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.**

Last week 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%)**.

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 will be eligible to begin scheduling vaccinations this week (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://outercap.org/2020/12/23/outercap-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 ~~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

MA DPH Data Dashboard, WEEKLY REPORT of 3/4/21 (for the Period 2/14/21 to 2/27/21)

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	2,977	132	21.1	Lower	60,620	3,762	151	4.01%	No Change
Bourne	21,026	1,032	66	22.4	Lower	34,822	2,446	73	2.98%	No Change
Brewster	9,926	376	11	7.9	Lower	15,411	977	14	1.43%	No Change
Chatham	5,830	259	8	9.8	Lower	7,658	400	8	2.00%	Lower
Dennis	13,088	567	30	16.4	Higher	16,036	984	33	3.35%	Higher
Eastham	4,603	122	13	20.2	Higher	4,260	288	16	5.56%	Higher
Falmouth	31,190	1,197	59	13.5	Higher	50,724	2,996	74	2.47%	Higher
Harwich	12,589	580	16	9.1	Lower	16,000	945	19	2.01%	Lower
Mashpee	15,535	627	34	15.6	Lower	20,751	1,222	34	2.78%	No Change
Orleans	5,620	247	13	16.5	Lower	6,123	431	16	3.71%	Lower
Provincetown	2,583	62	1	5.5	Higher	4,260	256	3	1.17%	Higher
Sandwich	21,078	898	62	21.0	Higher	24,683	1,676	67	4.00%	Higher
Truro	1,968	39	1	3.6	Lower	1,856	99	2	2.02%	Lower
Wellfleet	2,760	56	1	10.4	Higher	2,699	182	4	2.20%	Higher
Yarmouth	24,062	1,128	53	15.7	Lower	32,737	1,875	59	3.15%	Lower
Barnstable County	216,629	10,167	500	16.6	Lower	298,640	18,539	573	3.09%	No Change
Aquinnah	261	0	0	0	No Change	507	19	0	0%	No Change
Chilmark	759	15	0	9.4	Lower	3,407	191	1	0.52%	Lower
Edgartown	4,086	258	7	12.2	Lower	10,728	562	9	1.60%	Lower
Gosnold	45	5	0	0	No Change	124	1	0	0%	No Change
Oak Bluffs	5,209	231	8	11.0	Lower	7,319	408	8	1.96%	Lower
Tisbury	4,174	264	7	12.0	Lower	13,664	805	7	0.87%	Lower
West Tisbury	2,871	94	5	12.4	No Change	4,848	308	5	1.62%	Lower
Dukes County	17,404	872	28	11.5	Lower	40,597	2,294	30	1.31%	Lower
Nantucket	11,416	1,168	22	13.8	Lower	23,049	1,568	22	1.40%	Lower
Dukes and Nantucket Counties	28,820	2,039	50	12.4	Lower	63,646	3,862	52	1.35%	Lower
State	6,964,383	553,220	20,763	21.3	Lower	16,419,989	1,246,187	24,038	1.93%	Lower

Data Source: MA DPH, 3/4/21 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 2/27/21)

Sources: Census.gov; MA DPH Weekly COVID Report, 3/4/21. 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	1.82%
	Barn. County % of MA Tests, Past Two Weeks	1.49%
	Barn. County % of MA Total Confirmed Cases	1.84%
	Barn. County % of MA Confirmed Cases, Past Two Weeks	2.41%
	MA % Positive Tests Last 14 Days	1.93%
	Barnstable County % Positive Tests Last 14 Days	3.09%

Active COVID Clusters by Exposure Setting Type for the Period 1/31/20 to 2/27/21 (as of 3/4/21)

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 1/31/21 – 2/27/21)			Ongoing Clusters (Cluster Identified Prior to 1/31/21 But Not Meeting Criteria for Closing)			Total		
		Clusters	Confirmed Cases	Close Contacts	Clusters	Confirmed Cases	Close Contacts	Clusters	Confirmed Cases	Close Contacts
1	Household	7,431	18,952	---	27,390	4,180	---	34,821	23,132	---
2	Child Care	76	298	276	262	113	181	338	411	457
3	Colleges & Universities	38	249	33	29	79	29	67	328	62
4	Organized Athletics/Camps	27	119	241	56	25	67	83	144	308
5	Long Term Care Facilities	27	103	---	162	558	---	189	661	---
6	Industrial Settings	9	61	34	47	47	30	56	108	64
7	24/7 Congregate Settings	15	48	10	72	15	7	87	63	17
8	Retail & Services	12	48	12	43	19	9	55	67	21
9	Social Gatherings	8	48	6	34	7	13	42	55	19
10	Senior Living	8	40	4	118	114	17	126	154	21

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 will become eligible for vaccination.

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 (which opened yesterday) 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.

Next week **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.

(Insert updated Gantt chart on Thursday, 3/11)

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.

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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