Understanding & Planning for the Next Phases of COVID

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Understanding & Planning for the Next Phases of COVID:
- A Webinar for Leaders of Community Organizations

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Outline

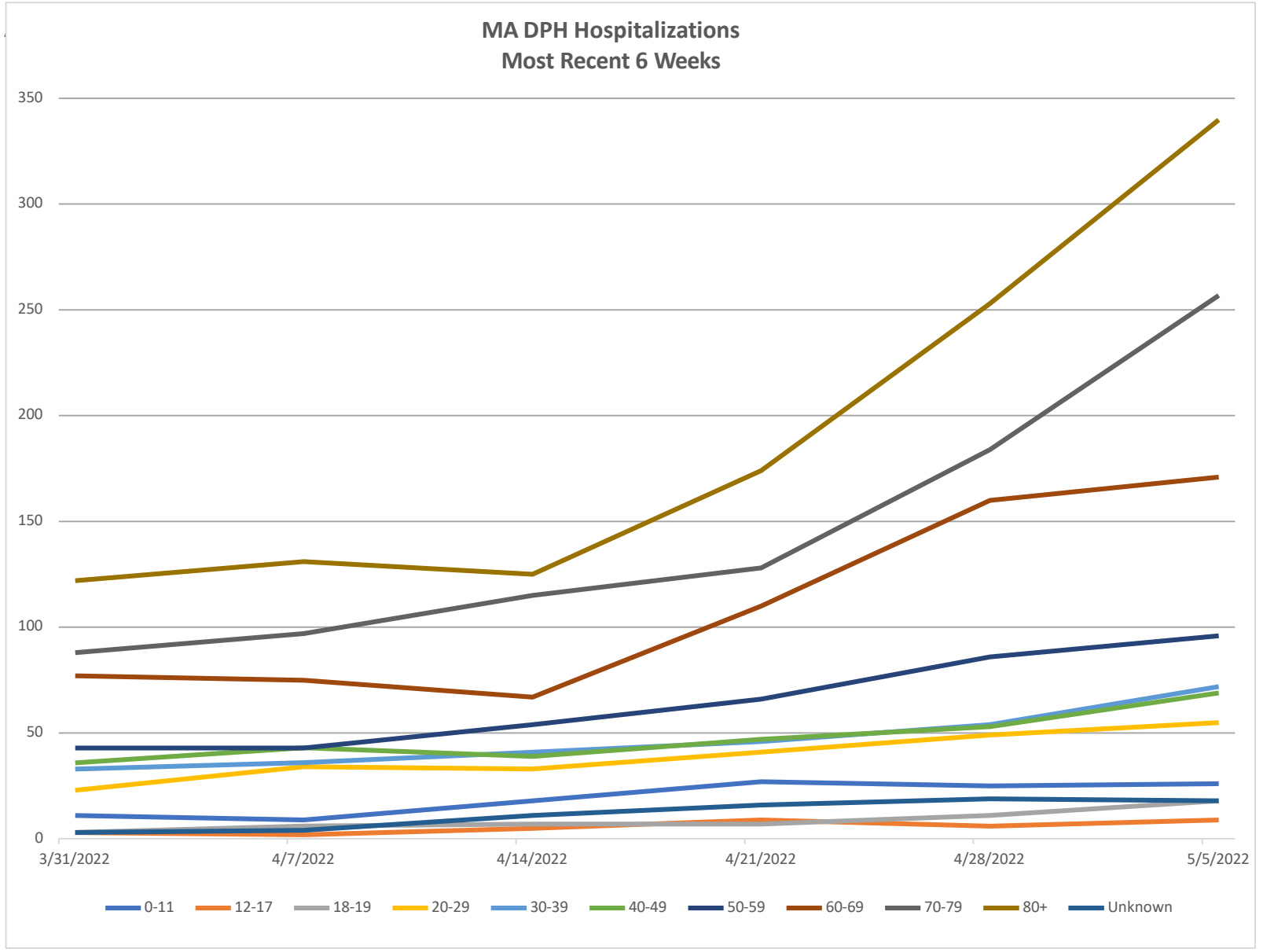
- Background data
- What do we have left for protection?
  - Profound gaps for 5 to 11s and boosters
- Hallmarks of successful COVID vaccine interventions
- How will the pandemic play out in the next few months?
  - What are our best metrics?
  - What do we have to do to prepare ourselves?
- Questions for consideration

Test positivity rates, Massachusetts-now highest since height of Omicron

Ending week of February 5, 2022	**6.48%**
March 26,2022	1.98%
April 2, 2022	2.38%
April 9, 2022	2.93%
April 16, 2022	3.72%
April 23, 2022	4.39%
April 30, 2022 May 5, 2022	5.11% 6.35%

Age distribution of cases(%), MDPH 2022-weeks with highest rates-totals 100%

	0-4	5-9	10-14	15-19	20-29	30-39	40-49	50-59	60-69	70-79	80+
Feb 12, 2022	7.4	6.6	6	8.6	17.7	15.2	11.9	**10.9**	**8.0**	**4**	**2.9**
May 7,2022	5.4	3.7	3.7	6.6	21.8	16.1	11.6	**12**	**10**	**5.4**	**3.6**


MA DPH Hospitalizations
Most Recent 6 Weeks
350
300
250
200
150
100
50
0
3/31/2022
4/7/2022
4/14/2022
4/21/2022
4/28/2022
5/5/2022
0-11
12-17
18-19
20-29
30-39
40-49
50-59
60-69
70-79
80+
Unknown

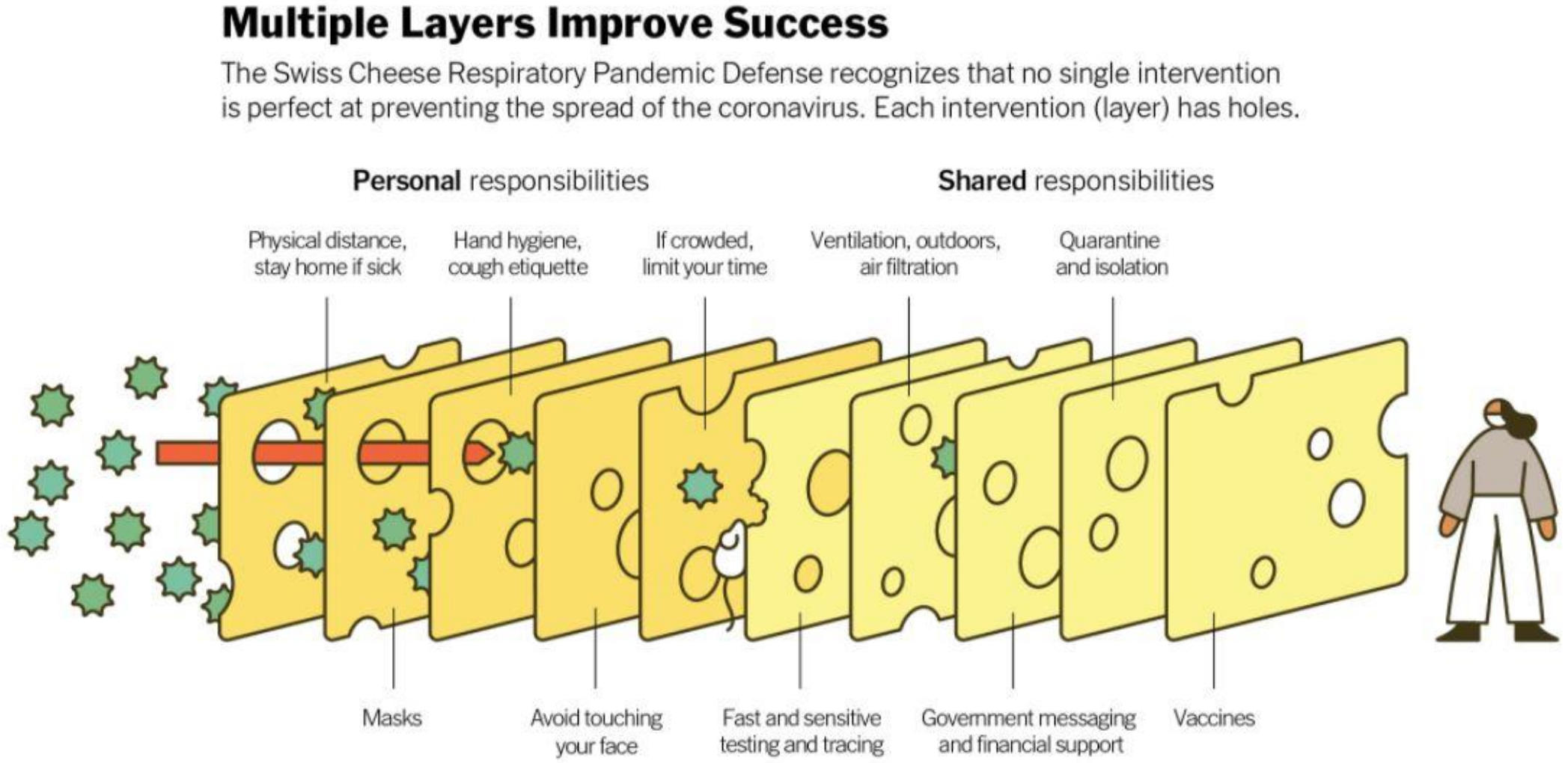
Proportion of MetroWest children testing positive for COVID-19, 9/1/21-4/30/22 (source: DESE)

- Communities with 30%+ of students with COVID-Sudbury*, Northborough, Southborough, Medfield*, Medway
- 25% to 29.9%-Bellingham, Norfolk, Wayland, Natick*, Franklin*, Hopedale, Hopkinton*, Millis, Wellesley*, Sherborn
- 20% to 24.9%-Dover-Sherborn, Dover, Mendon/Upton, Ashland, Holliston, Framingham*, Weston
- 15% to 19.9%-Marlborough*, Milford*, Hudson, Lincoln-Sudbury
- <15%-Needham
- Data reported from district dashboards and reported to DESE
- * Districts with 1,000+ infections in children and staff

Mitigation Strategies

- ‘But we don’t want to rely on vaccines to get us out of the pandemic’

Multiple interventions at various levels often work best

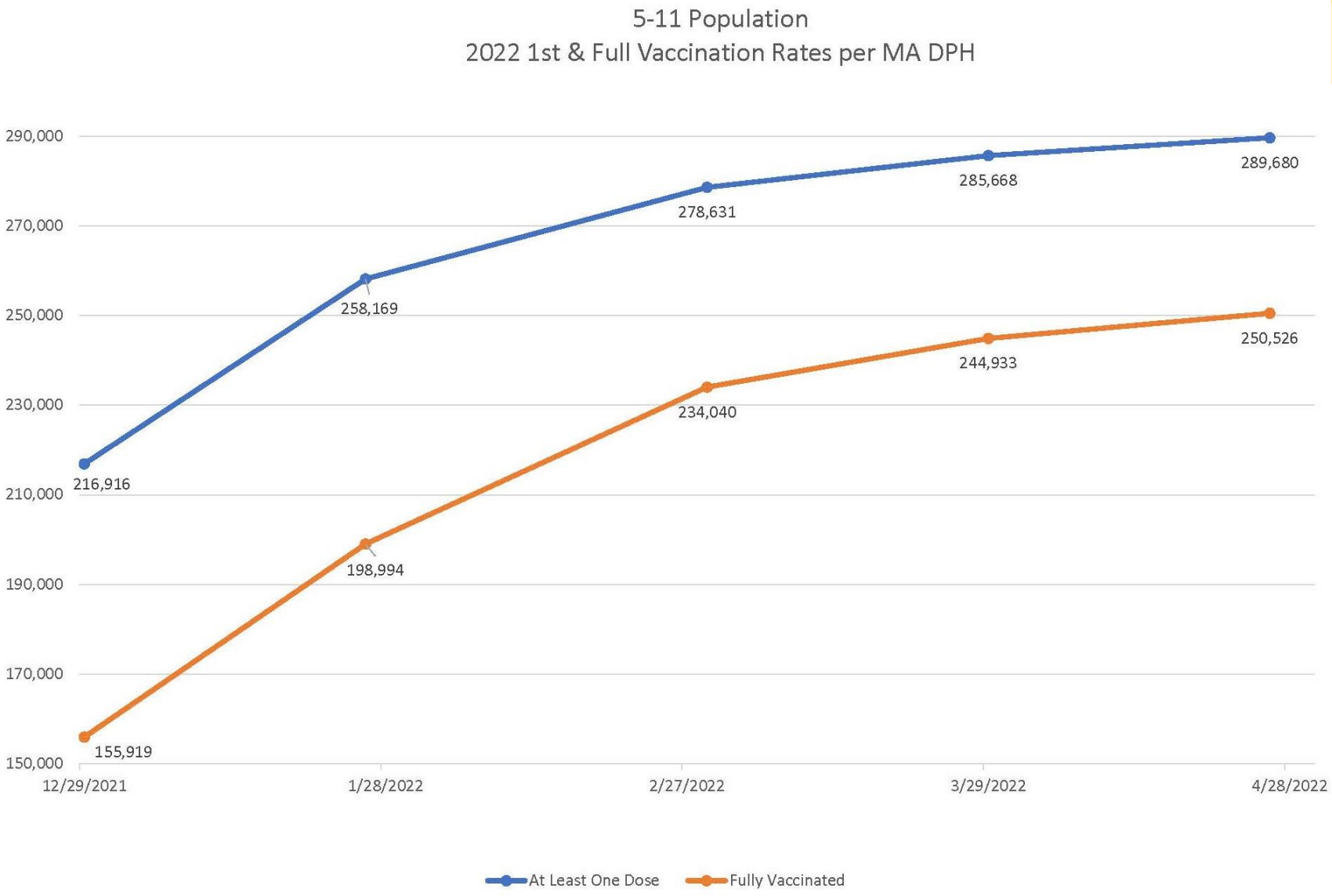


But, how many levels do we have left?

- We have plenty of room for improvement with vaccines
- We have lost masks in schools and most all indoor settings, **but** do we have to revisit this?
- PCR testing is under-utilized
- Rapid antigen testing faced with large inequities
- Contact tracing and social distancing are obsolete
- Ventilation-no organized audit of school buildings and public buildings
- If Congress does not approve the White House's request for an additional $22.5 billion in COVID emergency aid, the U.S. is "going to run out of treatments, we're going to run out of testing."

The effect of vaccines in real-time-Change in the Ratio of MA Cases and Deaths (1/1/20-1/28/22) by increase in vaccination exposure

State Population	Timeframe	%	Total 1st Dose Vaccinated *	# of 1st Dose Moderna or Pfizer	# of 1-Dose Janssen	# of 2nd Moderna or Pfizer	# of Booster Vaccinated	Cumulative Cases	Cumulative Deaths	New Cases	New Deaths	Cases per Death
6,964,383	1/1/20–12/14/20	0%	0	0	0	0	0	283,146	11,135	-	-	25.4
6,964,383	12/15/20-3/6/21	20%	1,397,614	1,390,259	7,355	672,014	0	557,802	15,773	265,486	4,638	57.2
6,964,383	3/7/21-4/10/21	40%	2,851,772	2,695,542	156,230	1,570,771	0	618,054	16,707	60,252	934	64.5
6,964,383	4/11/21-5/17/21	60%	4,183,590	3,951,103	232,487	2,984,809	0	657,119	17,073	39,065	366	106.7
6,964,383	5/18/21-11/18/21	80%	5,570,956	5,244,957	325,999	4,494,268	860,474	826,996	18,524	169,877	1,451	117.1
6,964,383	11/19/21-1/28/22	87%	6,048,034	5,708,974	339,060	4,857,404	2,663,189	1,473,996	20,958	647,000	2,434	265.8


5-11 Population
2022 1st & Full Vaccination Rates per MA DPH
290,000
270,000
250,000
230,000
210,000
190,000
170,000
150,000
12/29/2021
1/28/2022
2/27/2022
3/29/2022
4/28/2022
216,916
258,169
278,631
285,668
289,680
155,919
198,994
234,040
244,933
250,526
At Least One Dose
Fully Vaccinated

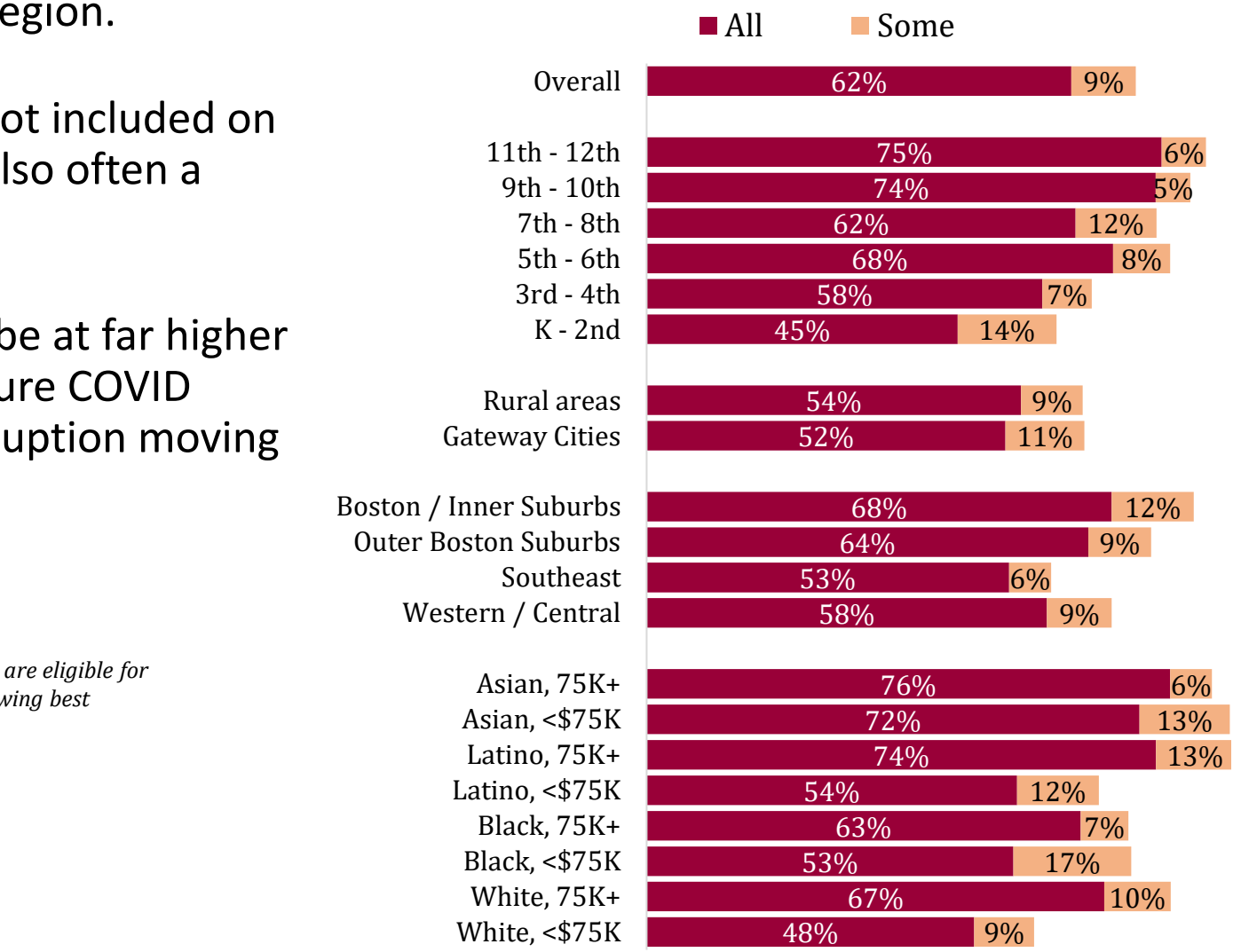
Inequities in vaccination rates-survey of 1,400+ Massachusetts parents

- The % who say their children are vaccinated varies widely by income, age, and region.
- Partisanship was not included on this survey but is also often a factor.
- Some schools will be at far higher ongoing risk of future COVID outbreaks and disruption moving forward.

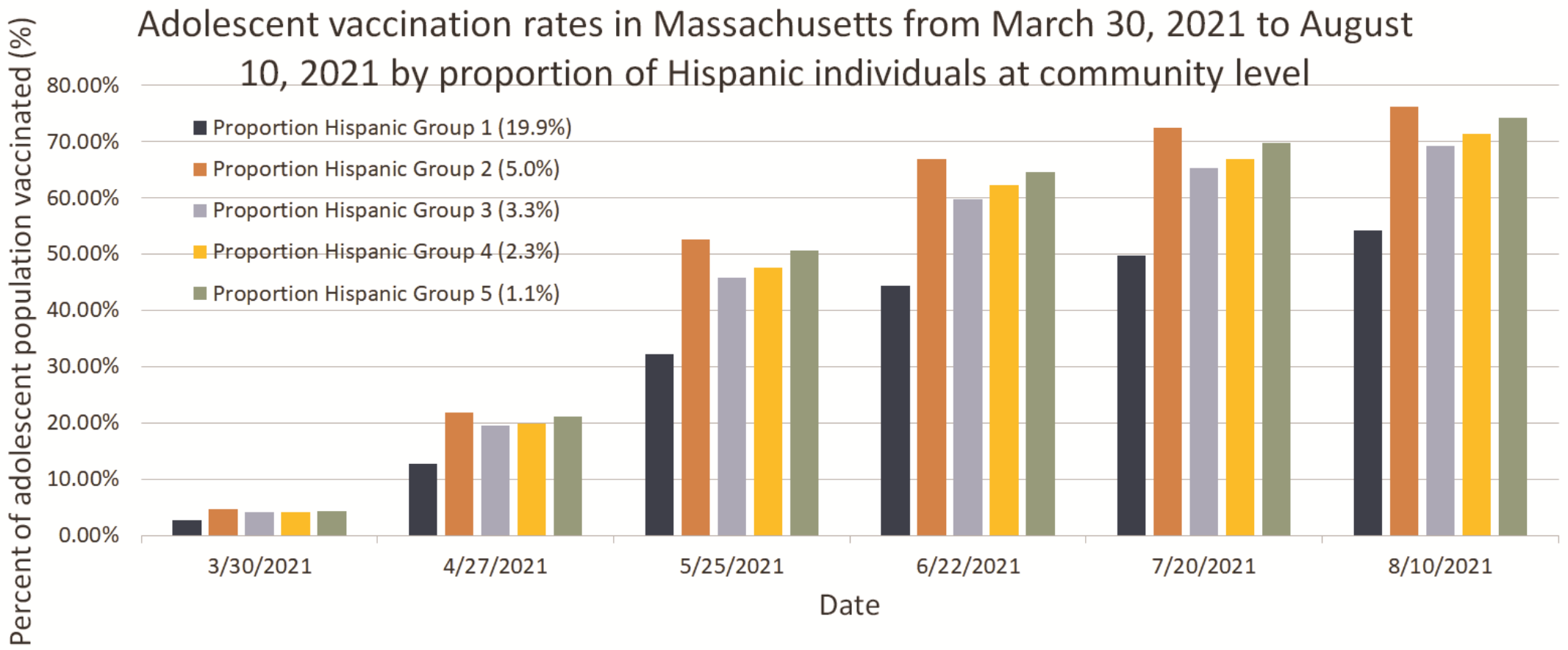
Q: Thinking about your children who are eligible for the COVID vaccine, which of the following best applies?

Who has gotten their children vaccinated

% of parents who say ____ of their children are vaccinated



Weekly Massachusetts adolescent vaccination rates by Hispanic ethnicity. Data reflect those adolescents receiving one or more doses of the COVID-19 vaccine. Proportion Hispanic Group 1, Proportion Hispanic Group 2, Proportion Hispanic Group 3, Proportion Hispanic Group 4, and Proportion Hispanic Group 5 had proportion of Hispanic individuals compared to the entire quintile's population as: 19.9%, 5.0%, 3.3%, 2.3%, and 1.1% respectively.



- Among **vaccinated parents**, there are many who have not taken the step of having their children vaccinated.
- In general though, vaccinated parents are more likely to also have their children vaccinated.

Parents who are vaccinated are more likely to get their children vaccinated too

% of parents in each vaccine status group who say _____ of their children are vaccinated

	Parent vaccine status			
	Vaccinated and boosted (60%)	Vaccinated, not boosted (20%)	Partially vaccinated (3%)	Not vaccinated (13%)
All of my children are vaccinated	83%	45%	38%	9%
Some of my children are vaccinated	8%	13%	33%	7%
None of my children are vaccinated	**8%**	**39%**	25%	81%
Don't Know / Refused	<1%	3%	4%	3%

Q: Children ages 5 and older are currently eligible for the COVID vaccine. Thinking about your children who are eligible for the COVID vaccine, which of the following best applies? Being fully vaccinated means your children have received 2 shots of the Pfizer vaccine.

- Among those who do not plan to vaccinate their children, common reasons are safety concerns, the age of their children and lack of trust in the vaccine.

Vaccine safety was the topic cited most often

% of parents whose children are not vaccinated citing _____ as a reason for not vaccinating children

Safety concerns (side effects, long-term effects)	32%
Age (too young, not eligible, not at risk)	18%
Trust / risk (don't trust it, more risk getting vaccine)	17%
Want more research / information	16%
Unnecessary (don't need it, parents don't want them to have it)	11%
Choice (freedom of choice, their choice)	6%
Immunity / already had COVID	5%
Personal (medical, religious, personal reasons)	5%
Other	11%
Never / not interested / No	6%

Note: Results may add to more than 100% as responses could be coded into multiple categories.
Q: Why are you not planning to have your child(ren) vaccinated?

COVID-19 Vaccination Rates in 25 MetroWest communities

City/Town	Fully Vaccinated 5–11-Year-Olds As of 4/26/22
Massachusetts	49%
Bellingham	32%
Hudson	43%
Marlborough	44%
Mendon	44%
Franklin	49%
Milford	50%
Hopedale	53%
Framingham	56%
Millis	59%
Medway	68%
Ashland	75%
Wellesley	75%
Sudbury	76%
Norfolk	79%
Natick	83%
Northborough	84%
Dover	85%
Holliston	89%
Westborough	92%
Needham	93%
Hopkinton	>95%
Medfield	>95%
Sherborn	>95%
Southborough	>95%
Wayland	>95%

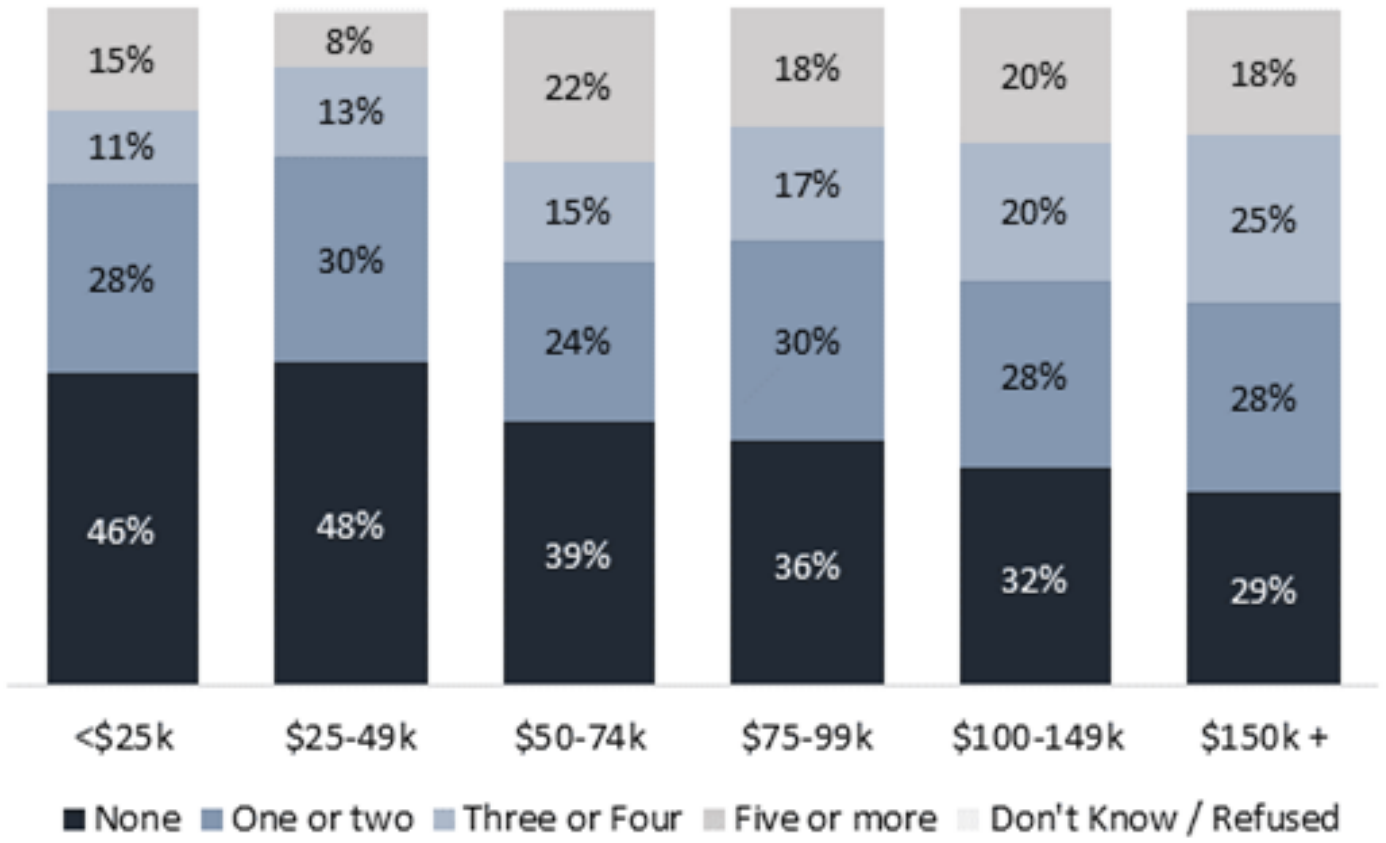
City/Town	Percentage of fully vaccinated who are Boosted: Ages 12+ As of 4/26/22
Massachusetts	56%
Bellingham	52%
Milford	53%
Marlborough	54%
Framingham	57%
Mendon	59%
Hopedale	60%
Hudson	60%
Franklin	64%
Ashland	65%
Westborough	66%
Medway	67%
Millis	67%
Northborough	68%
Norfolk	69%
Hopkinton	70%
Southborough	70%
Holliston	71%
Natick	71%
Dover	72%
Wellesley	72%
Medfield	73%
Sherborn	74%
Sudbury	75%
Needham	76%
Wayland	76%

Data Source: Massachusetts Department of Public Health: [Massachusetts COVID-19 vaccination data and updates | Mass.gov]

Practical ways to boost pediatric vaccines for 5 to 11s (patient and provider activation)

- Take advantage of upcoming camp physical and school physicals in the summer
- Can we figure out a way to get single vials for vaccinating youngest children? Now 10 doses per vial
- Survey local pediatricians to make sure that they have adequate supply and willingness to give vaccine
- Will new publicity for vaccinating kids under 6 bring in families who have not vaccinated children 5 to 11?
- Make huge re-effort to vaccinate 5 to 11s in the Fall at school

- **Number of home tests purchased in last 3 months, by income level (MA statewide survey April 2022) Steve Koczela**
- *% in each group who say they bought each number of tests*
-
-



Community-wide Interventions to improve vaccinations

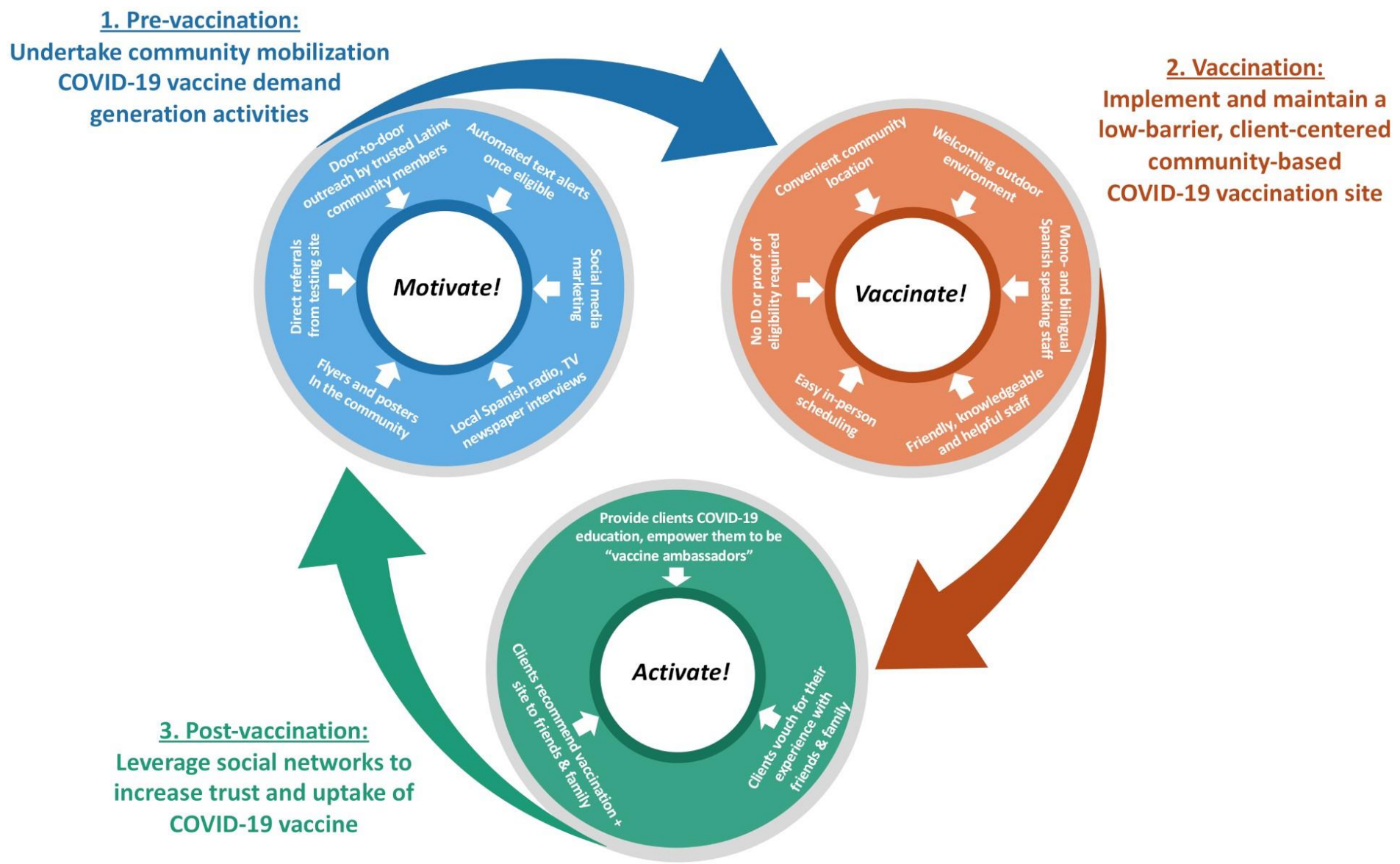
Vaccination campaign in Chelsea MA

- Building on Chelsea's strength of pandemic relief and vaccinations for adults and older teens (>90%)
- Have received state funding
- Wrap around services-door to door-
  - Do you need information on jobs, computer classes, food, English lessons, housing, vaccine?
- Arises out of community health centers
- Boost access and counter misinformation

A community-based vaccination initiative in the Mission District, San Francisco

- There were 20,792 COVID-19 vaccinations administered at the neighborhood site during the 16-week evaluation period. Vaccine recipients had a median age of 43 years, 54% were male and 70% were Latinx, 14% white, 7% Asian, 3% Black, and 6% other.
- Marquez C, et al. A multi-component, community-based strategy to facilitate COVID-19 vaccine uptake among Latinx populations: From theory to practice. PLoS One. 2021

- https://pubmed.ncbi.nlm.nih.gov/34543291/


1. Pre-vaccination:
Undertake community mobilization COVID-19 vaccine demand generation activities
Door-to-door outreach by trusted Latinx community members
Automated text alerts once eligible
Social media marketing
Local Spanish radio, TV newspaper interviews
Flyers and posters in the community
Direct referrals from testing site
Motivate!
2. Vaccination:
Implement and maintain a low-barrier, client-centered community-based COVID-19 vaccination site
Convenient community location
Welcoming outdoor environment
Mono- and bilingual Spanish speaking staff
Friendly, knowledgeable and helpful staff
Easy in-person scheduling
No ID or proof of eligibility required
Vaccinate!
3. Post-vaccination:
Leverage social networks to increase trust and uptake of COVID-19 vaccine
Provide clients COVID-19 education, empower them to be "vaccine ambassadors"
Clients vouch for their experience with friends & family
Clients recommend vaccination site to friends & family
Activate!

The pandemic is likely far from over

- Endemic connotes a disease trajectory that is more static and predictable
- High number of cases, increasing hospitalizations, multiple waves and surges, rapidity of new variants, possibility of immune-evasion, and strong variation across states is far more indicative of a pandemic
- Coupled with loss of most forms of protection and high variability in vaccine uptake for youngest children and boosters

Thoughts on how the pandemic will play out in the coming months?

- First, how do we define where we are?
- On April 26th, Dr. Fauci told PBS NewsHour that "we are certainly, right now, in this country, out of the pandemic phase.”

- “I want to clarify one thing,” Dr. Fauci told NPR on April 27th“I probably should have said the acute component of the pandemic phase, and I understand how that can lead to some misinterpretation.”

Thoughts on how the pandemic will play out in the coming months and years?

- COVID is different from flu in several important respects. With the flu, new variants arise and spread less frequently but with COVID, it's been every few months. Whether that will continue is unclear.
- COVID, with the newest variants, is also far more contagious than flu. And immunity from vaccines and prior infection wanes at a rate that is higher than other non-flu diseases that we have vaccines for, such as measles, mumps, and rubella.
- The COVID vaccines have been quite strong over time against severe disease, but the combination of new variants and time passing has reduced the effectiveness of vaccines against transmission.
- There's the likelihood that as people's immune systems encounter more and more variants and people are infected and survive that infection, we will build up immunity to severe outcomes. In a pandemic you have highly vulnerable people, many of them quite aged, who've never seen the virus before, because it's a novel virus.

Thoughts on how the pandemic will play out in the coming months?

- ‘On a flight the captain will turn off the fasten seat belt sign, which means you’re free to move about the cabin. But sometimes there is turbulence, and you need to sit down and put it back on. That is not a flip flop, that’s air travel. Covid is like that. Get it?’
- My #1 favorite quote on Twitter

- ‘For the love of God please stop repeating the lie that “so far the US hasn’t had a big surge from Omicron subvariants like we saw abroad.” It’s not that we aren’t having a surge, it’s that we aren’t SEEING the surge, due to manipulated metrics & a shift to unreported home tests.’
- My 2nd Favorite Quote on Twitter

What are the best metrics to be looking at to see what the COVID burden is?

School building-specific wastewater data-can work at U Mass Amherst be replicated in our 1820 K-12 buildings in the state?

Current move of many MetroWest school nurses to add results of rapid antigen testing to school dashboards

School-based attendance records-triggers for medical/public health review

How can we be prepared for the next large surge or pandemic?

- How can we determine if there is virus in the neighborhood?
- How can we make sure that there is housing for people who need to quarantine?
- How do we provide income to ensure that people do not have to go back to work prematurely?
- How to make sure that we have adequate supply of PPE well enough in advance?
- That lab-based or rapid testing is pro-actively distributed
- Mental health resources are far more widely and equitably provided

How do we fight against the urge to say that the pandemic is over?

- Preventing or reducing the number of new cases is important as the greater the number of cases, the greater the risk of new variants
- Witness the offspring of new and transmissible Omicron variants
  - BA.2 accounts for more than 90% of COVID cases in the country
  - BA.4 and BA.5 is in South Africa and makes up more than 50% of all cases
- Proliferation of new cases creates havoc at day care, schools, workplaces, and hospitals
- We have lost 1.5 million school days (300,000 kids x 5 days) in our state this year
- Casual transmission to high-risk individuals in our families and communities remains commonplace
- And we can’t fly blind without knowing the toll of long COVID

Parent support for mitigation measures in Massachusetts-statewide survey April 2022, 1,469 respondents

Free rapid tests and regular in-school testing are broadly popular

% of parents who strongly / somewhat support each mitigation measure

	Overall	White	Black	Latino	Asian
Providing rapid tests for families to take home	86%	85%	91%	89%	91%
Allowing students who may have been exposed to COVID to remain in class if they test negative	76%	79%	63%	69%	81%
Regularly testing all students at school	68%	64%	83%	77%	77%
A vaccine mandate for all teachers and staff	61%	58%	64%	67%	76%
Requiring all students and staff to wear masks	56%	50%	80%	67%	71%
A vaccine mandate for all students	54%	50%	60%	56%	74%

Questions for Consideration

How can we be most ready to vaccinate our children under the age of 5?

What can we do to improve vaccination rates for children ages 5 to 11?

How can we equalize access to rapid antigen testing?

Should the state and communities play a stronger role in monitoring and improving utilization of Test to Treat locations?-map of all sites/telehealth

How can we continue the conversation about pandemic preparations going forward?

How can we continue to provide reasonable, equity-driven and scientifically-driven guidance within our communities?