

Immunization in Immigrant Communities: Challenges & Best Practices

Presenters:

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for Children



Presenter and Planner Disclosure

- The presenters for this educational activity have no relevant financial relationships with ineligible companies to disclose.
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2025 Vaccine Educational Webinar Series

Immunization in Immigrant Communities:

Challenges & Best Practices

Wednesday, February 26, 2025, 12:00-1:00 PM ET



Webinar Housekeeping



Webinar participants will be muted, and their video will be off.



Please use the Chat button to tell us about any technical issues you are having.



Questions can be entered at any time by clicking on the Q&A button. Q&A will follow the presentations.





Immunization in Immigrant Communities

Challenges & Best Practices

Fiona Danaher, MD, MPH Priya Sarin Gupta, MD, MPH Vandana Madhavan, MD, MPH

Objectives

- Describe the common challenges of vaccine access and uptake experienced within immigrant communities
- Utilize at least one cultural humility best practice when educating about or providing vaccines to immigrant patient populations
- Review common drivers of vaccine hesitancy within immigrant communities and identify strategies to promote confidence and increased acceptance
- Understand the impact of the current rapidly evolving policy environment on vaccine access and uptake within immigrant communities



Challenges



Behavioral ABC Model: Understanding Vaccine Hesitancy



Historical events

Antecedents

- Lived experiences
- Cultural influences

Beliefs

- Bias, racism, discrimination
- Experimentation
- Unethical practices

Consequences

- Mistrust
- Hesitance
- Refusal

Richard-Eaglin A, McFarland ML. Applying Cultural Intelligence to Improve Vaccine Hesitancy Among Black, Indigenous, and People of Color. Nurs Clin North Am. 2022 Sep;57(3):421-431. doi: 10.1016/j.cnur.2022.04.008. Epub 2022 Jul 20. PMID: 35985729; PMCID: PMC9296256.



Antecedents: Xenophobia as Nosophobia



- Chinese Exclusion Act of 1882
- Chemical baths to "disinfect" workers at US-Mexico border
- Ellis Island/Angel Island --> current practices
- Title 42



Antecedents: Health Care Experiences



- Perceptions about hospitals:
 - Places where people go in healthy and come out with many diagnoses
 - Places where people go to die
 - Doctors just trying to make money
 - Government may run hospitals and have complete access to medical records
 - Complicit in forced sterilizations, torture
 - Seeking care leading to removal of children



Antecedents: Access Challenges

Phrase translated	Sample or most common error	Percentage correct
Your wife is stable	Your wife cannot fall over	53.8
Your husband had a cardiac arrest	Your husband's heart was imprisoned	53.8
Your husband had a heart attack	Your husband's heart was attacked	73.1
Your wife needs to be ventilated	Your wife needs to be aired	26.9
Your child's condition is life threatening	Your child's state is not life stopping	69.2
Your child has been fitting	Your child has been constructing	7.7
Your child will be born premature	Your child is sleeping early	76.9
Your husband has the opportunity to donate his organs	Your husband is now ready to donate	88.5
We will need your consent for operation	We need your consent for operating (such as machinery)	61.5
Did he have high fever at home?	Your home temperature was high	65.4

Patil S, Davies P. Use of Google Translate in medical communication: evaluation of accuracy. BMJ. 2014 Dec 15;349:g7392. doi: 10.1136/bmj.g7392. PMID: 25512386; PMCID: PMC4266233.



- Language access
 - Google Translate has only 57.7% accuracy when used for medical phrase translations
- Insurance
 - Public charge fears
- Primary care shortages in low income communities

Translation on Virginia Department of Health's website told Spanish readers they didn't need the COVID19 vaccine

Beliefs: Religious Concerns



- Faith healing, body as temple
- Fetal origins of cell lines used in vaccine development
- Ingredients of porcine or bovine origin
- Misunderstandings of vaccine development (e.g., vaccines as blood products, genetically modified, laced with contaminants, etc.)
- Objections to vaccines for sexually transmitted diseases (e.g., Hep B, HPV) as promoting promiscuity

N.B. No major world religions prohibit vaccines, but individual interpretation of religious doctrines may vary

Grabenstein JD. What the world's religions teach, applied to vaccines and immune globulins. Vaccine. 2013 Apr 12;31(16):2011-23. doi: 10.1016/j.vaccine.2013.02.026. Epub 2013 Feb 26. PMID: 23499565.



Beliefs: Mistrust



- "Western plot" concerns re: sterilization, HIV, geopolitics
- Fears about:
 - Privacy
 - Cost, public charge
 - Immigration enforcement



Vaccine Hesitancy – Alternate Frameworks

McKee and Bohannon. Exploring the Reasons behind Parental Refusal of Vaccines. *J Pediatr Pharmacol Ther.* 2016.

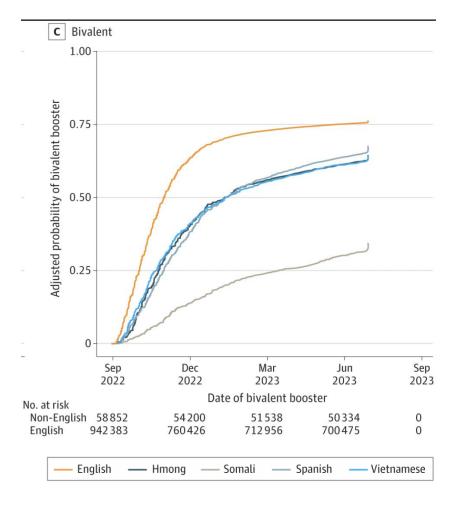
- Religious
- Personal/Philosophical
- Safety
- Desire for more education

Betsch et al. Using Behavioral Health Insights to Increase Vaccination Policy Effectiveness. *Policy Insights from Beh and Brain Sci.* 2015.

- Incorrect knowledge
- Complacency/apathy
- Contradictory information
- Lack of resources



Consequences



- Spread of misinformation
- Lower rates of vaccine uptake
- Longer delays in accessing vaccines

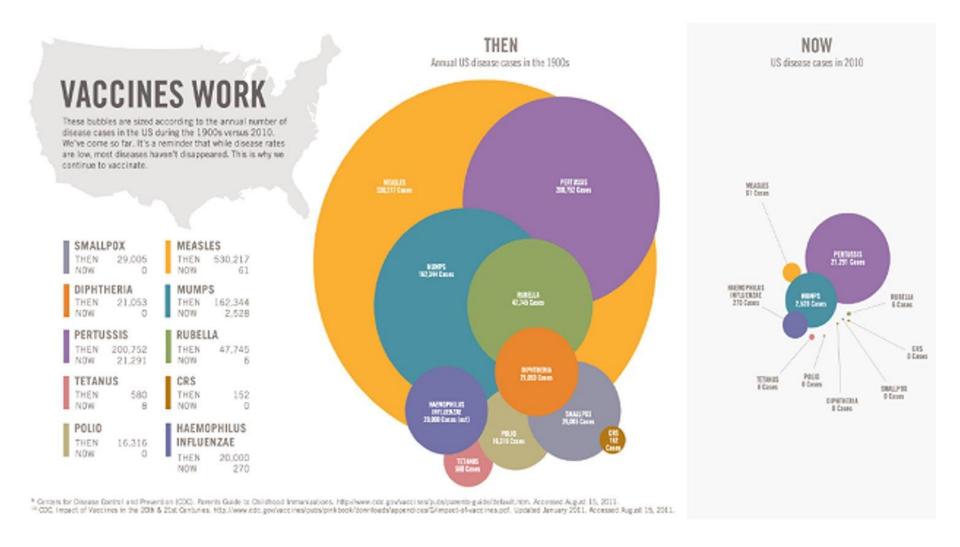
Nolan MB, Chrenka E, DeSilva MB. Time to COVID-19 Vaccination by Language and Country of Origin. *JAMA Netw Open.* 2024;7(10):e2437388. doi:10.1001/jamanetworkopen.2024.37388



Why Do Vaccines Matter?



Vaccines Work





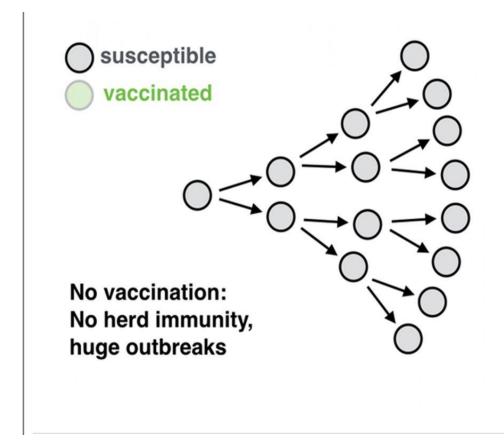
Counseling Content



Herd Immunity

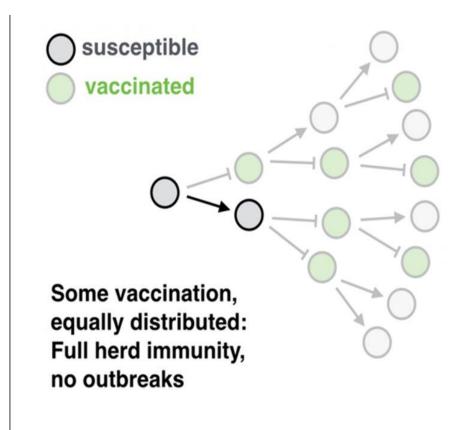


Herd Immunity ~90-95% for Measles (91% of 2yo >1 dose, 13-17yo w/ 2 doses, 2019)



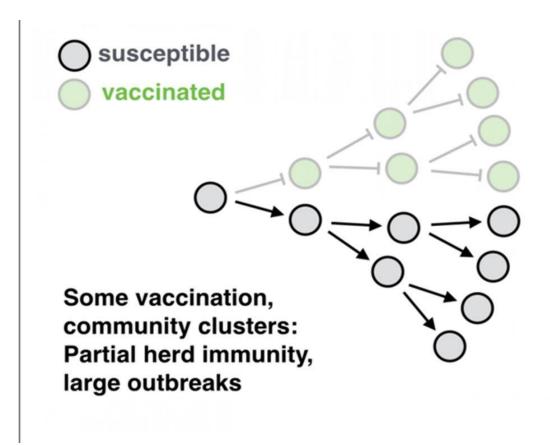


Herd Immunity (cont'd)





Herd Immunity (cont'd)



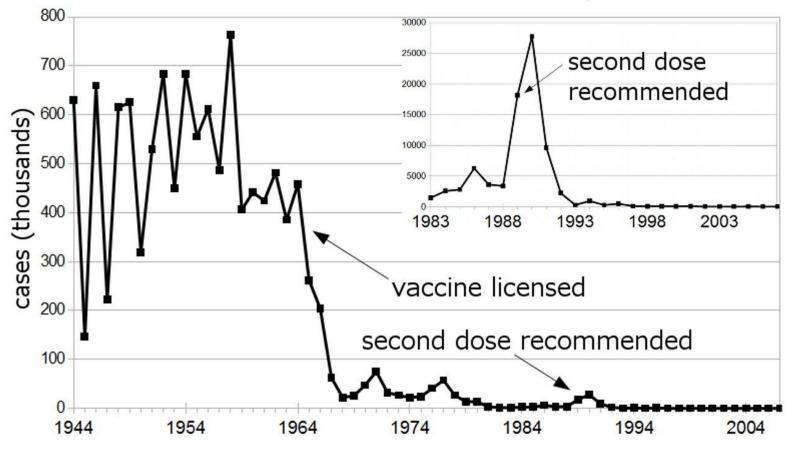


Specific Diseases – Measles Example



Measles Cases Over Time (CDC)

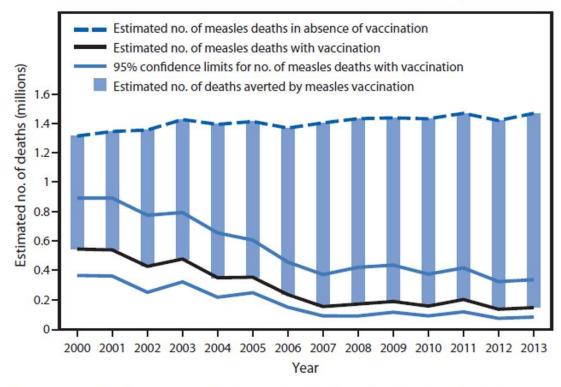
Measles cases in the United States, 1944-2007





Measles Cases Averted Worldwide (CDC, November 2014)

FIGURE. Estimated number of measles deaths and number of deaths averted by measles vaccination — worldwide, 2000-2013



Alternate Text: The figure above is a bar chart showing the estimated number of measles deaths and number of deaths averted by measles vaccination worldwide during 2000-2013. During this period, estimated measles deaths decreased 75%, from 544,200 to 145,700, and all regions had substantial reductions in estimated measles mortality. Compared with no measles vaccination, an estimated 15.6 million deaths were prevented by measles vaccination during 2000-2013.

Use of trade names and commercial sources is for identification only and does not imply endorsement by the U.S. Department of Health and Human Services.

References to non-CDC sites on the Internet are provided as a service to MMWR readers and do not constitute or imply endorsement of these organizations or their programs by CDC or the



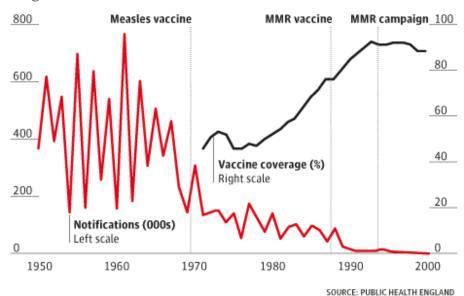
Measles in US – declared eliminated in 2000



Measles in the UK

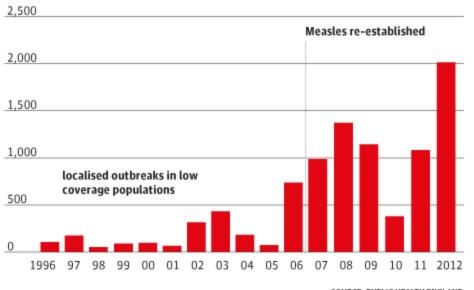
Annual measles notification & vaccine coverage

England and wales 1950-2000



Annual confirmed cases of measles

England and Wales 1996-2012



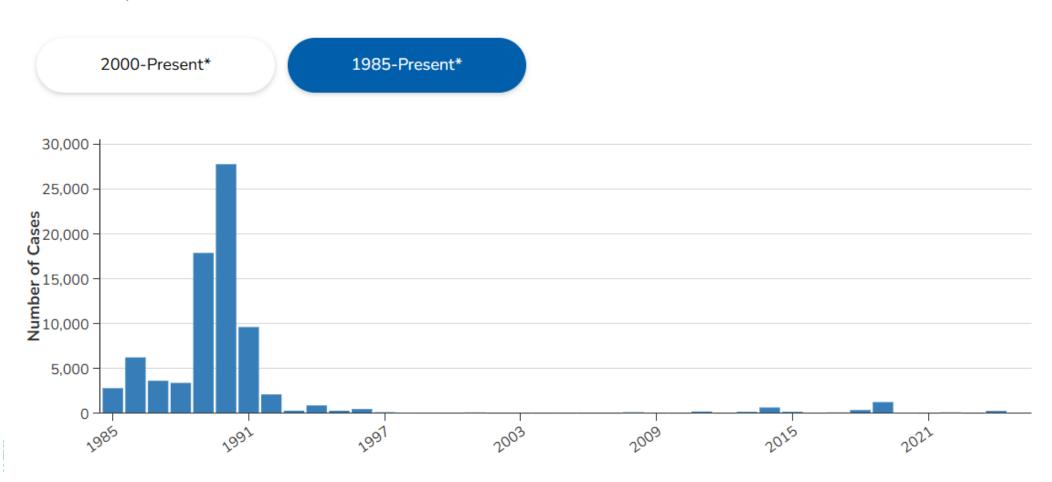
SOURCE: PUBLIC HEALTH ENGLAND



Measles in the US - CDC

Yearly measles cases

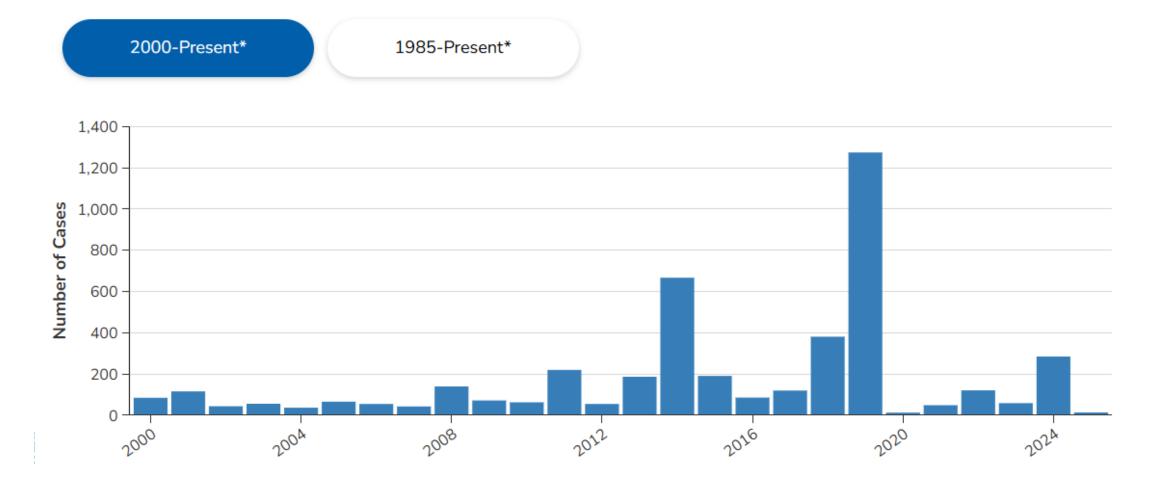
as of February 6, 2025



Measles in the US - CDC

Yearly measles cases

as of February 6, 2025



Measles in the US (2024) - CDC

U.S. Cases in 2025

Total cases

14

Age

To protect patient privacy, age category breakdowns are not currently provided

Vaccination Status

Unvaccinated or Unknown: 100%

One MMR dose: 0% Two MMR doses: 0%

U.S. Hospitalizations in 2025

43%

43% of cases hospitalized (6 of 14) for isolation or for management of measles complications.

Percent of Age Group Hospitalized

To protect patient privacy, age category breakdowns for hospitalizations are not currently provided.

U.S. Cases in 2024

Total cases

167

Age

Under 5 years: **77 (46%)** 5-19 years: **37 (22%)** 20+ years: **53 (32%)**

Vaccination Status

Unvaccinated or Unknown: 84%

One MMR dose: **11%** Two MMR doses: **5%**

U.S. Hospitalizations in 2024

53%

53% of cases hospitalized (88 of 167) for isolation or for management of measles complications.

Percent of Age Group Hospitalized

Under 5 years: **61% (47 of 77)** 5-19 years: **41% (15 of 37)** 20+ years: **49% (26 of 53)**

Measles – How Bad Can It Be?

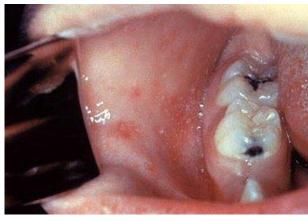


Measles

- Caused by virus (only 1 type)
- Fever/cough/runny nose/red eyes --> classic rash and mouth lesions
- Incubation period is 8-12 days









Measles Complications

- Ear infections
- Pneumonia
- Croup
- Acute encephalitis (often resulting in permanent brain damage)
 - 1 in every 1,000 cases
- Death from acute measles (typically pneumonia or encephalitis)
 - Still 1-3 of every 1,000 cases in US
 - Washington state July 2015 first measles related death since 2003
 - Higher in children younger than 5 and with compromised immune systems



Measles Complications

Subacute sclerosing panencephalitis (SSPE)

- Progressive deterioration in behavior and cognitive functioning, seizures --> death
- Occurs 7 to 10 YEARS after acute measles
- Higher risk in children who had measles before age 2
- Estimated risk 4-11 of every 100,000 (rare)
- Germany: 1 in 11,000, 1 in 2,000 for infants 27 deaths from SSPE from 2005-2010



Measles is Highly Contagious...

- Patients are contagious 4 days before rash to 4 days after rash
- Airborne transmission
 - Special precautions in hospital
 - Virus can stay in air for 2 hours



...And Has No Specific Treatment

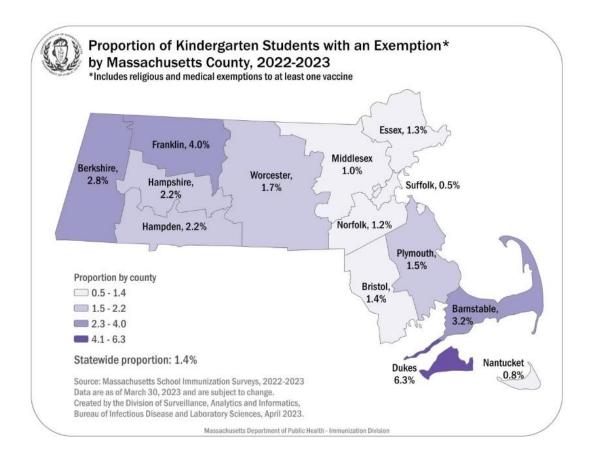
- Exposed patients
 - Can get vaccine within 72 hours
 - Or immune globulin ("general antibody") within 6 days
- Post-exposure preventive therapy will not provide 100% guaranteed protection
- One antiviral medication (ribavirin) is sometimes used to treat severely ill patients "off-label," no controlled trials, many side effects
- Vitamin A therapy is beneficial but does not treat measles itself

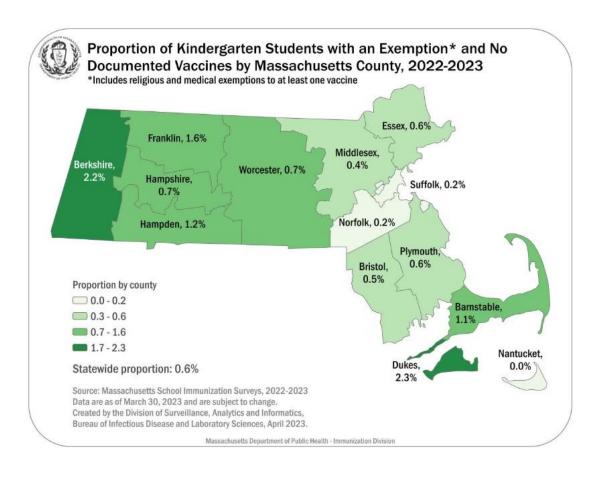


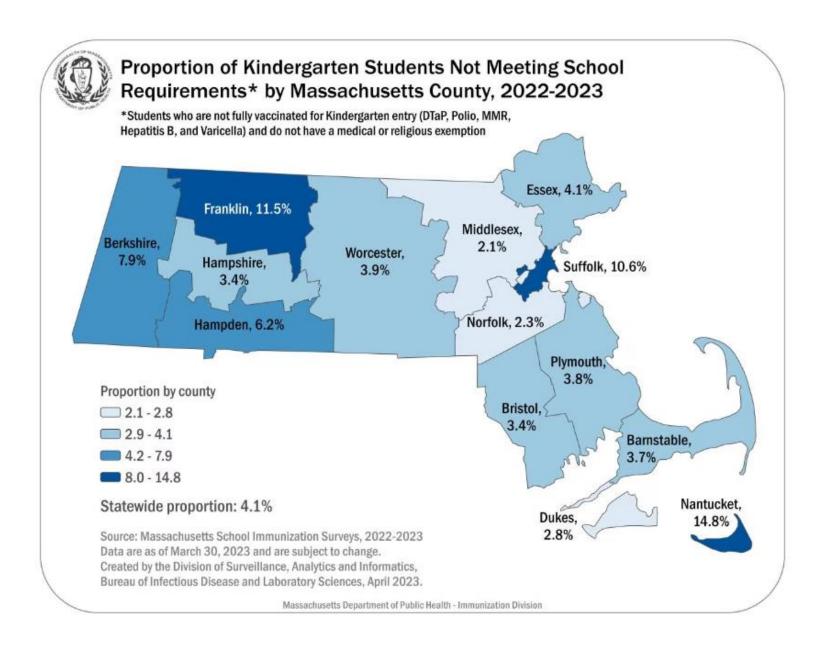
Massachusetts Trends



Could We See Measles in MA?









MA KG Immunization Data

https://www.mass.gov/info-details/school-immunizations#kindergarten-data-

SCHOOL	SCHOOL TYPE	CITY	COUNTY	5 DTAP ▼	4 POLIO	2 MMR	3 HEP B	2 VARICELLA	SERIES *	EXEMPTION	UN- IMMUNIZEP	NO RECORD	GAP ▼
CENTERVILLE ELEMENTARY	PUBLIC	BARNSTABLE	BARNSTABLE	98%	98%	98%	98%	98%	98%	1.5%	0.0%	0.0%	0.0%
TRINITY CHRISTIAN ACADEMY	PRIVATE	BARNSTABLE	BARNSTABLE	†	Ť	†	Ť	†	Ť	†	Ť	Ť	Ť
WEST BARNSTABLE ELEMENTARY	PUBLIC	BARNSTABLE	BARNSTABLE	99%	97%	97%	99%	97%	96%	2.8%	1.4%	0.0%	1.4%
CAPE COD ACADEMY	PRIVATE	BARNSTABLE	BARNSTABLE	†	t	†	t	†	t	†	t	t	t
FAITH CHRISTIAN SCHOOL	PRIVATE	BARNSTABLE	BARNSTABLE	*	*	*	*	*	*	*	*	*	*
WALDORF SCHOOL OF CAPE COD	PRIVATE	BARNSTABLE	BARNSTABLE	*	*	*	*	*	*	*	*	*	*
BARNSTABLE COMMUNITY INNOVATION SCHOOL	PUBLIC	BARNSTABLE	BARNSTABLE	99%	99%	99%	100%	99%	99%	0.0%	0.0%	0.0%	1.3%
HYANNIS WEST ELEMENTARY	PUBLIC	BARNSTABLE	BARNSTABLE	94%	94%	95%	94%	94%	88%	1.2%	0.0%	2.5%	11.1%
CRANEVILLE	PUBLIC	DALTON	BERKSHIRE	97%	97%	97%	97%	97%	97%	2.6%	1.3%	0.0%	0.0%
ST AGNES ACADEMY	PRIVATE	DALTON	BERKSHIRE	†	t	†	†	†	t	t	†	t	†
ABBOTT MEMORIAL	PUBLIC	FLORIDA	BERKSHIRE	†	†	†	†	†	t	†	†	†	†
JRI BERKSHIRE MEADOWS	SPECIAL EDUCATION	GREAT BARRINGTON	BERKSHIRE	*	*	*	*	*	*	*	*	*	*
THE BERKSHIRE WALDORF SCHOOL	PRIVATE	GREAT BARRINGTON	BERKSHIRE	48%	41%	34%	43%	25%	23%	22.7%	22.7%	22.7%	54.5%
MUDDY BROOK ELEMENTARY	PUBLIC	GREAT BARRINGTON	BERKSHIRE	90%	90%	90%	90%	92%	88%	8.0%	6.0%	0.0%	4.0%
HANCOCK ELEMENTARY	PUBLIC	HANCOCK	BERKSHIRE	Ť	Ť	†	Ť	†	Ť	†	Ť	Ť	Ť
KITTREDGE	PUBLIC	HINSDALE	BERKSHIRE	†	t	†	†	†	t	†	t	Ť	†
MIECEODOLICH ELEMENTARY	DITELLO	IAMEGRODOLICH	DEDVCIUDE	+	+	+	+	+	+	+	+	÷	39 ⁺

Points to Ponder

- Pockets of existing underimmunization already exist in MA (and in other states) with excellent overall immunization rates
- Immigrant communities also at risk of underimmunization:
 - Lack of access pre-arrival (especially during travel)
 - Slow catch-up rates (again, lack of access, etc.)
 - Other barriers
- Routine immunization rates are falling
- Declining herd immunity PLUS high measles transmissibility

 possible outbreaks:
 - Schools
 - Shelters, close living quarters
 - Immigration detention centers (role of underimmunized staff
 https://www.nbcnews.com/health/health-news/measles-outbreak-traced-unvaccinated-border-staffers-n607241)



Helpful Resources

Recommended Child and Adolescent Immunization Schedule for ages 18 years or younger; 2025 U.S.

CDC Vaccine Schedules App for Healthcare Providers | Vaccines & Immunizations | CDC

Home | Immunize.org

Immunizations (AAP)

Immunizations - HealthyChildren.org

Vaccine Education Center | Children's Hospital of Philadelphia

Measles: A Dangerous Illness | Vaccine Information



Strategies in Immigrant Communities

Access: Language Barriers

LANGUAGE ACCESS LAWS

TITLE VI OF THE CIVIL RIGHTS ACT Protects against discrimination of any individual based on national origin, which includes language **EXECUTIVE ORDER 13166** Requires public entities to create and maintain a language access plan that ensures meaningful access to programs THE AFFORDABLE CARE ACT Requires healthcare organizations to ensure equal access for individuals with LEP through interpretation and translation THE AMERICANS WITH DISABILITIES ACT Requires meaningful accommodations for the Deaf and Hard of Hearing through auxiliary services like ASL interpretation

Understanding Language Access Laws: A Comprehensive Guide. Jeenie.com. Published August 2, 2023. https://jeenie.com/resources/blog/language-access-laws-comprehensive-guide

- Patients who speak languages other than English have a **right** to interpreter services 24/7 over the phone, by video or in-person
 - Ensure all staff trained in access & utilization
 - Bilingual staff can get QBS certified but should not function as interpreters
- Consider language access along every step of care process (e.g., scheduling, check in, etc.)
- Consider literacy levels and tech barriers
 - Provide opportunities for walk in visits or phone scheduling

Who do Language Access Laws apply to?

State and local governments and tribal authorities

Law enforcement

Schools and school districts Hospitals, health care providers, and health facilities Financial institutions (banks, credit unions, lenders)

nonprofit providing















Access: Translating Immunization Records

Vaxref

https://forms.web.health.state.mn.us/form/vaxref



VaxRef Form

Translate: English -

* Asterisk (*) Indicates required field

Please select the language from the dropdown menu above that matches the vaccine record. This application will translate your vaccine records to English.

You should always give the original immunization records with the translated materials to your doctor or other health care professionals.

New Mexico Department of Health

https://www.nmhealth.org/publication/view/help/453/

Foreign Language Terms

Aids to translating foreign immunization records.

 Table 1:
 Disease, Vaccine, and Related Terms.
 This table lists terms for vaccine

preventable diseases and vaccines, and other terms that might be found on an

immunization record, by language.

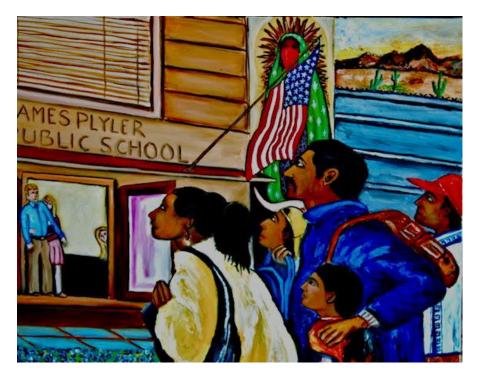
Trade Names. This table lists the names of specific vaccines that are used, or

have been used, internationally, along with the manufacturer and country or

region where the vaccine is produced or used, when known.



Access: School Considerations



Henry Trueba, Plyler v. Doe

- McKinney-Vento Act:
 - Protects access to education for children who lack a fixed, regular, and adequate nighttime residence
 - Mandates immediate enrollment of homeless students, even in the absence of normally required documentation (including vaccine records)
- All children, regardless of immigration status, have the right to free public K-12 education
- Students/families who speak LOTE are entitled to language-assistance programs



Access: Primary Care Shortages



Lucas Burtin, NYTimes

- DPH vaccination clinics at FWCs
- Local boards of health offer vaccine appointments in some municipalities
- Hospitals can consider offering more comprehensive vaccines during ER visits or inpatient stays
- Commercial pharmacies
 - Insurance challenges Vaccines for Children only covers vaccines for youth until their 19th birthday



Cultural & Structural Humility



Health Care For All Massachusetts

- Identify trusted community ambassadors –
 e.g., CBOs, religious leaders, CHCs, schools
 - Invest in & hire from community (e.g., CHWs)
 - Encourage continuous community feedback
- Co-locate at familiar/trusted neighborhood sites near public transportation
 - Mobile operations meet patients where they are
 - Consider the care environment do art, music, etc., reflect cultures of patients you are serving?



Address Fear



- Minimize ID/documentation requirements
- Protect & educate about confidentiality



Consider Cultural Accommodations

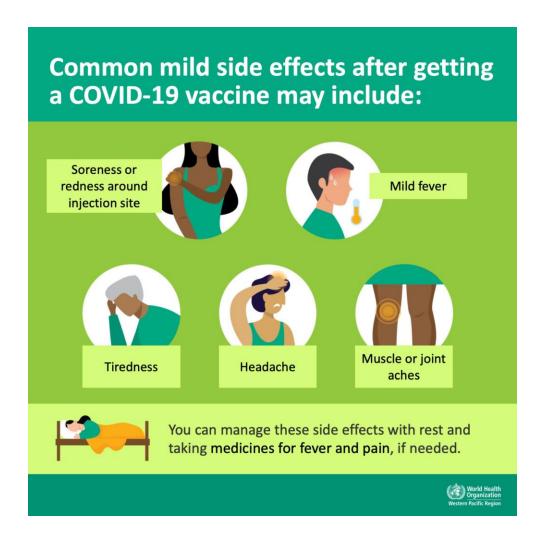


David Levene, The Guardian

- Ask all patients about privacy preferences
- Have privacy screens available
- Plan how to accommodate provider requests (e.g., preference for female provider)



Maintain Trust & Access



- Educate up front about potential side effects
 - Transparency builds trust and combats misinformation
- Maintain flexibility about missed appointments
 - Recognize realities of challenges around transportation, ability to miss work, etc.



Cultural Competence vs Cultural Humility

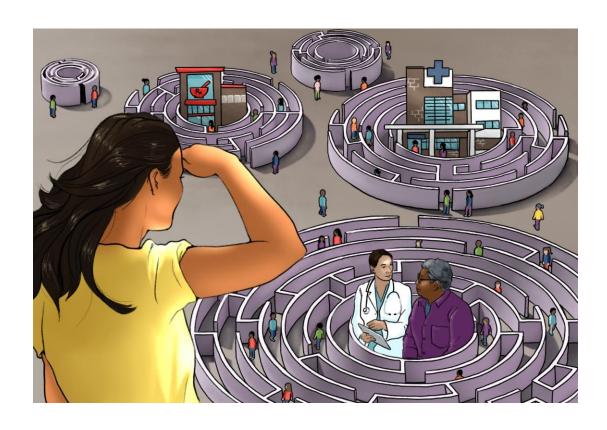


- Avoid assumptions
 - Culture is not monolithic/homogeneous
 - Identities are intersectional
 - Patients all have different individual experiences
- Exercise continuous curiosity and willingness to learn about others' beliefs/experiences, as well as your own
- If a patient is hesitant, ask them why and respond respectfully to their answer
 - Provide information but do not pressure

PBS Learning Media



Structural Competence & Humility



- Providing "immigration informed" care involves staying aware of changes in immigration policy that may contribute to patients' access & concerns, adjusting approach accordingly
- Seek guidance from immigrant communities about effective policy advocacy and solutions

From Barriers to Pathways: Understanding the Role of Immigration Status in U.S. Health Coverage. Robert Wood Johnson Foundation; 2023. https://www.rwjf.org/en/insights/our-research/2023/11/understanding-the-role-of-immigration-status-in-us-health-coverage.html





Mass General Brigham Community Health: *Community Care Vans*

Priya Sarin Gupta, MD MPH

Medical Director of Community-Based Clinical Programs

Mass General Brigham

Primary Care Physician

Massachusetts General Hospital Department of Internal Medicine /

Harvard Medical School





MGB Community Care Vans

- **Goal of Program:** To expand high quality health care to vulnerable populations; re-imagining our hospital's front door.
- Impact: Majority served on public insurance (greater than 55%), women>men, ethnic minorities (greater than 65%), nonwhite (~75%)
- Clinic Setting: Three vans, each DPH-licensed through an MGB entity (MGH, SH, BWH)
- **Services:** COVID vaccination/treatment, influenza vaccinations, hypertension and chronic disease treatment, SUD screening/treatment, SDOH screening, phlebotomy





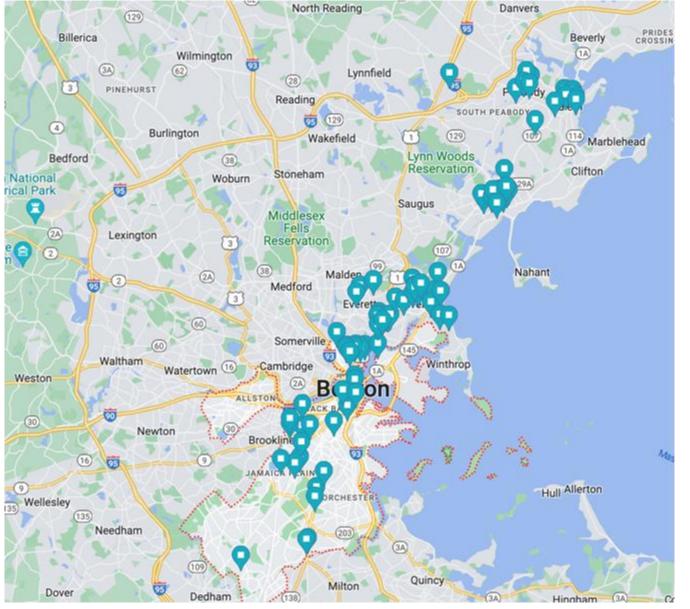
Mass General Brigham





Community Partners





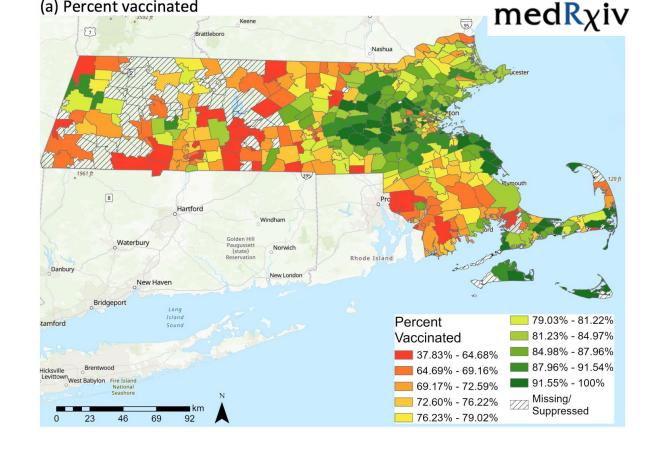




Wide disparities in COVID-19 vaccination coverage exist across local geographic scales

Inequities in COVID-19 vaccine and booster coverage across Massachusetts Zip codes:

Large gaps persist after the 2021/22 Omicron wave



(a) Percent vaccinated

Jacob Bor^{1,2}, Sabrina A. Assoumou^{3,4}, Kevin Lane⁵, Yareliz Diaz⁶, Bisola Ojikutu⁷, Julia Raifman⁶, Jonathan I. Levy⁵



Chelsea, a city hit hard by COVID, has become a vaccination standout

A city near Boston hit hard by the coronavirus becomes a vaccination standout

By Felice J. Freyer, Bianca Vázquez Toness and Diana Bravo Globe Staff and Globe Correspondent. Updated October 24, 2021, 4:05 p.m.



Health care professionals at a Mass. General vaccination van parked near the La Colaborativa food pantry administered COVID-19 vaccines and tests for residents during a mini-festival for teens in Chelsea, Mass., on Oct. 06. NATHAN KLIMA FOR THE BOSTON GLOBE/THE BOSTON GLOBE

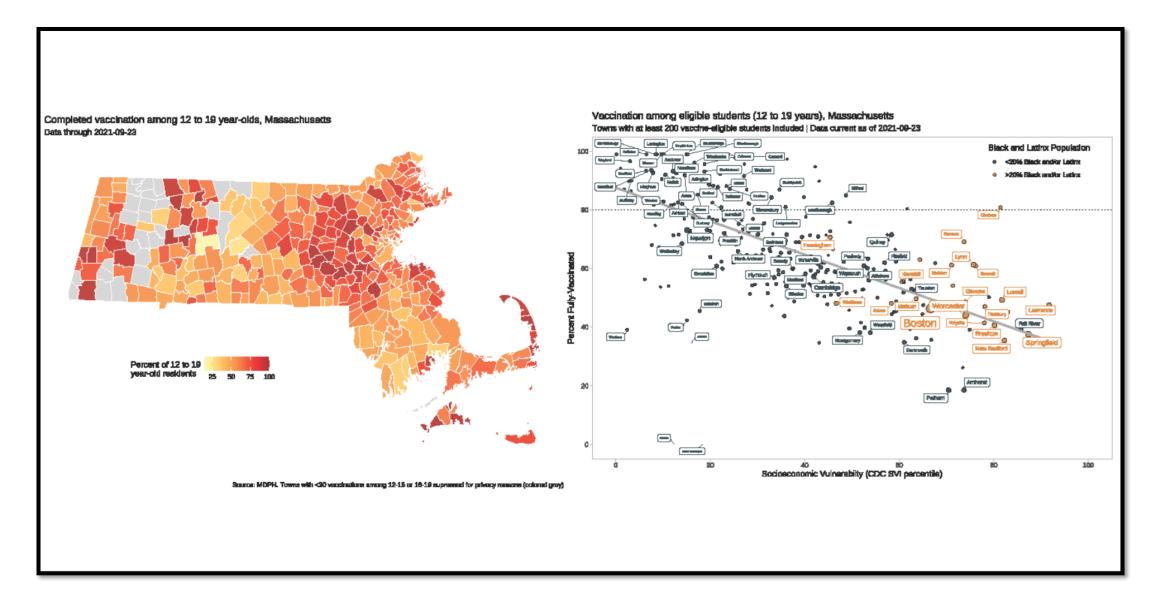
CHELSEA — The crew had been out on the streets for more than an hour before they found a man who needed a shot.

"The Chelsea experience is one we really need to learn from," said Carlene Pavlos, executive director of the Massachusetts Public Health Association. "It's one where we can see the value of efforts that are locally designed, locally led, and developed by the people most familiar with the community and most trusted by the community."



Successes







KEY STAKEHOLDER ENGAGEMENT



Outreach to local departments of health, community organizations and coalitions, school boards for a needs assessment

Involve and Collaborate

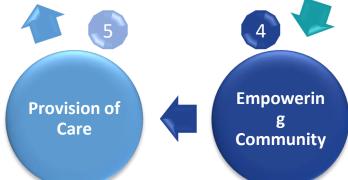
Consult and Needs
Assessment

Data Driven Approach

Engaged with >120 Key Stakeholders

Wastewater analysis, foot traffic, Covid rates, Social vulnerability index analysis

10000 Covid PCR Tests, **24000 Covid Vaccinations, 4000 Influenza Vaccines,** 10000 BP screenings, SDOH screening and connection to care



Ongoing engagement with key stakeholders



Lessons Learned About Mobile Health & Vaccination Provision

Mobile Health can help decrease barriers to healthcare access especially vaccine access

Mobile health can help address social determinants of health

Mobile health can support equitable care











Questions?



iGracias! Mèsi! iObrigado! 謝謝! Thank You!

