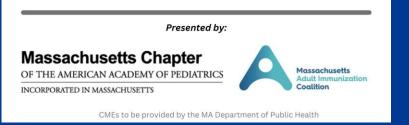
Vaccine Education Webinar Series



Immunization in Immigrant Communities: Challenges & Best Practices

Presenters:

Fiona Danaher, MD, MPH, Director, MGH Center for Immigrant Health; Chair, MGH Immigrant Health Coalition, Mass General Brigham Priya Sarin Gupta, MD, MPH, Medical Director for Mobile Health Services, MGH Kraft Center for Community Health, Mass General Brigham Vandana Madhavan, MD, MPH, Clinical Director, Pediatric Infectious Disease, Mass General for Children

Presenter and Planner Disclosure

- The presenters for this educational activity have no relevant financial relationships with ineligible companies to disclose.
- All other planners for this educational activity have no relevant financial relationships with ineligible companies to disclose.

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

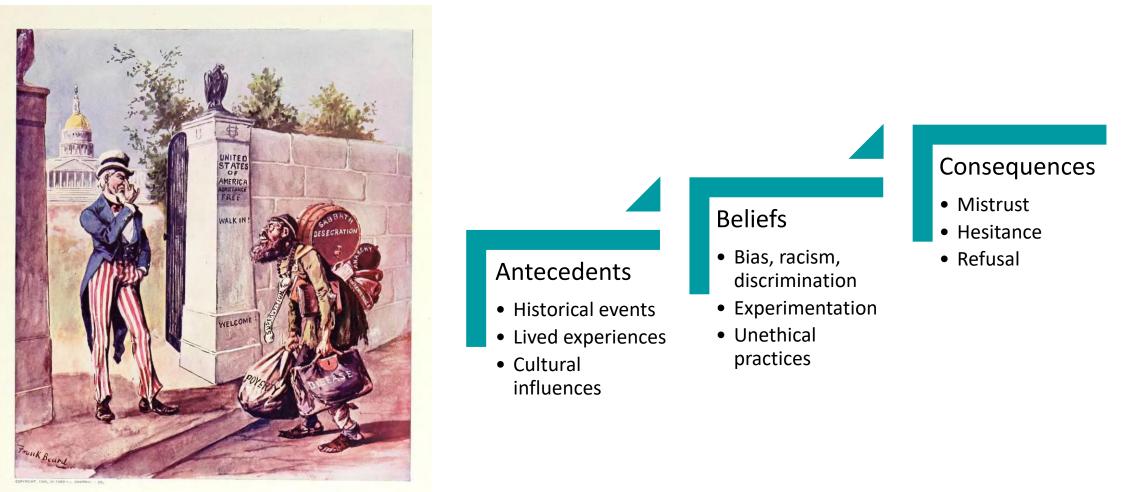
February 26, 2025

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



 THE
 STRANGER
 AT
 OUR
 GATE.

 EMIGRANT. -Can
 I come in?
 UNCLE SAM.-I 'spose you can: there's no law to keep you out.

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

List of medical phrases translated via Google Translate

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 Your child's state is not life stopping threatening	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 Your husband is now ready to donate donate his organs	88.5
We will need your consent forWe need your consent for operatingoperation(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

CORONAVIRUS

Translation on Virginia Department of Health's website told Spanish readers they didn't need the COVID-19 vaccine

y: Keyris Manzanares, WRIC osted: Jan 18, 2021 / 08:06 AM EST pdated: Jan 18, 2021 / 08:06 AM EST

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

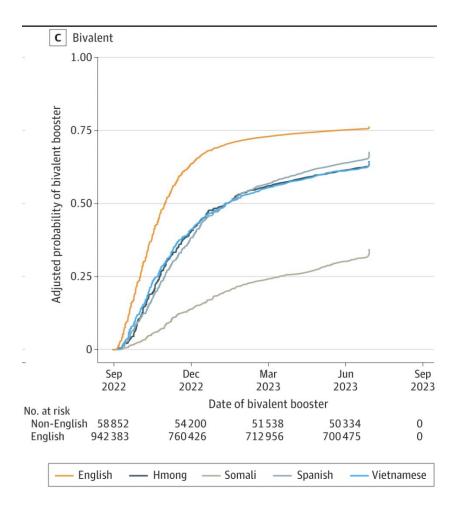
McKee and Bohannon. Exploring the Reasons behind Parental Refusal of Vaccines. *J Pediatr Pharmacol Ther*. 2016.

- 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



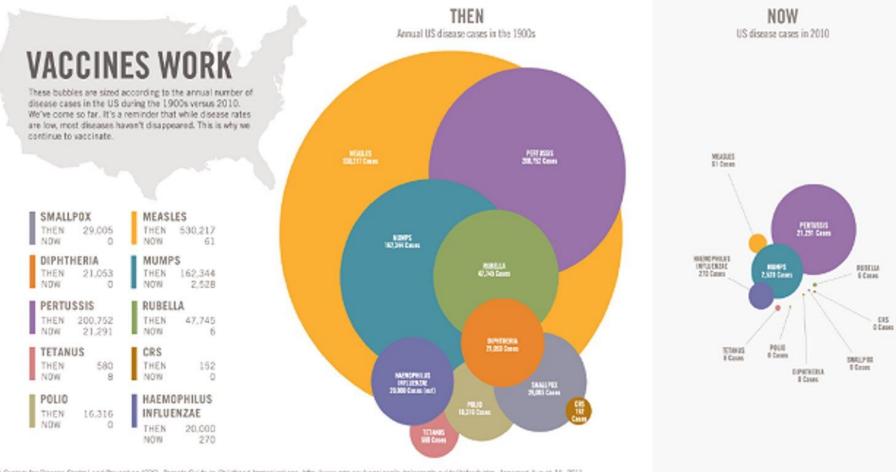
- Spread of misinformation
- Lower rates of vaccine uptake
- Longer delays in accessing vaccines

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

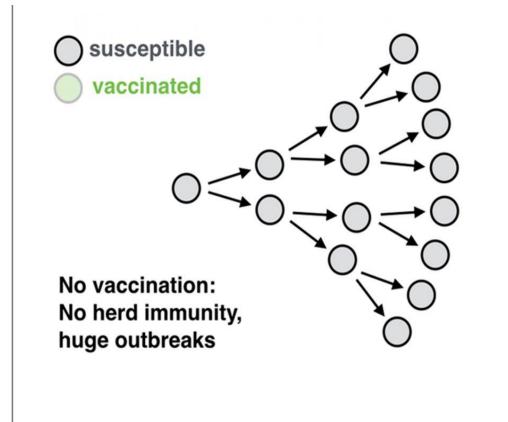


⁸ Centers for Disease Control and Prevention 6000; Parents Guide to Childhood Immanizations, http://www.cdc.gov/uscrimes/publicatents-guide/default.htm. Accessed August 15, 2011.
¹⁰ COC: Impact of Vaccines in the 2006 & 21st Centuries. http://www.cdc.gov/uscrimes/publicatents/pinkbook/downloads/appendices/Dimpact-of-Vaccines.pol. Updated January 2011. Accessed August 15, 2011.

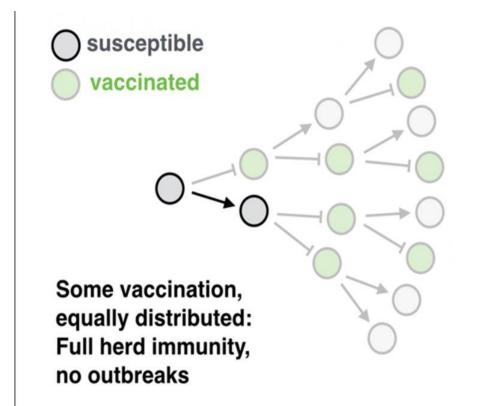
Counseling Content

Herd Immunity

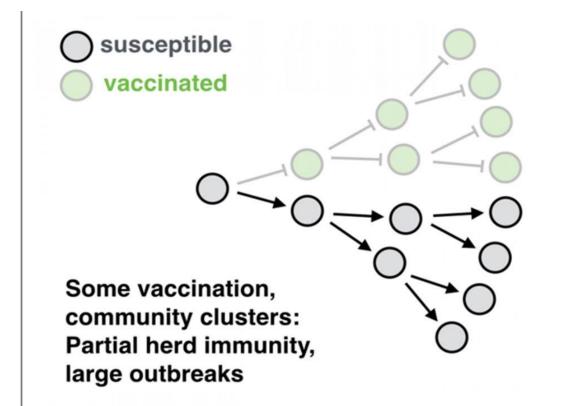
Herd Immunity ~90-95% for Measles (91% of 2yo >1 dose, 13-17yo w/ 2 doses, 2019)



Herd Immunity (cont'd)



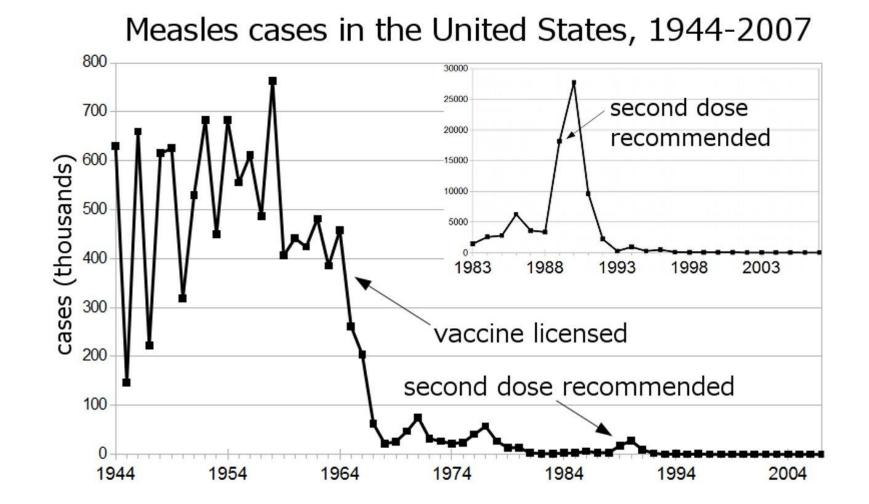
Herd Immunity (cont'd)



Specific Diseases – Measles Example

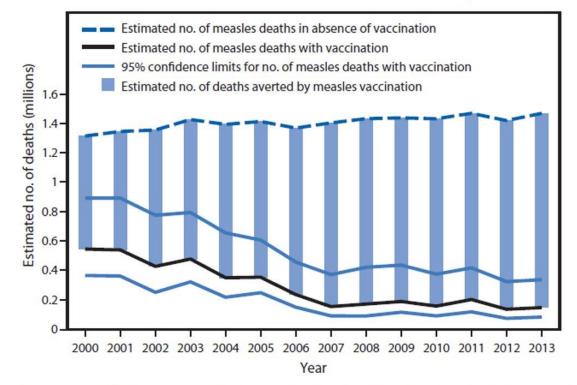


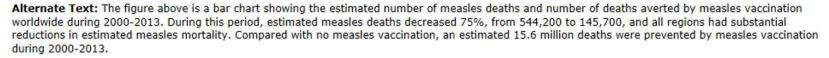
Measles Cases Over Time (CDC)



Measles Cases Averted Worldwide (CDC, November 2014)

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





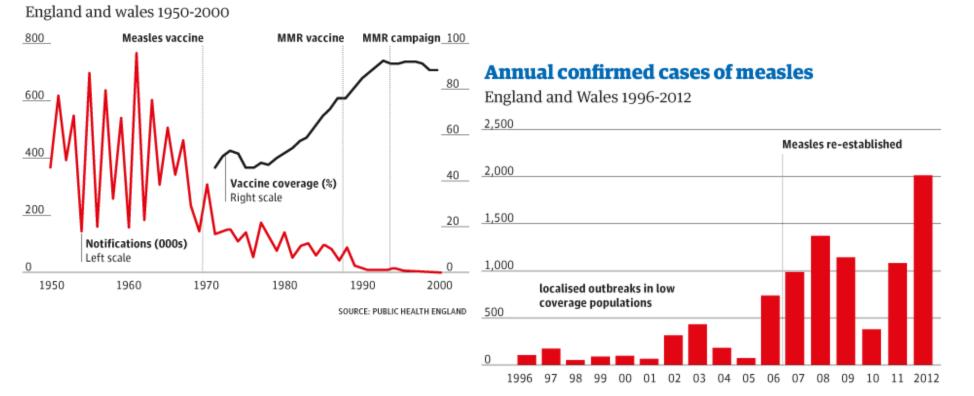
Use of trade names and commercial sources is for identification only and does not imply endorsement by the U.S. Department of Health and Human Services.

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 U.S. Department of Health and Human Services. CDC is not responsible for the content of pages found at these sites. URL addresses listed in MMWR were current as of the date of publication.

Measles in US – declared eliminated in 2000

Measles in the UK

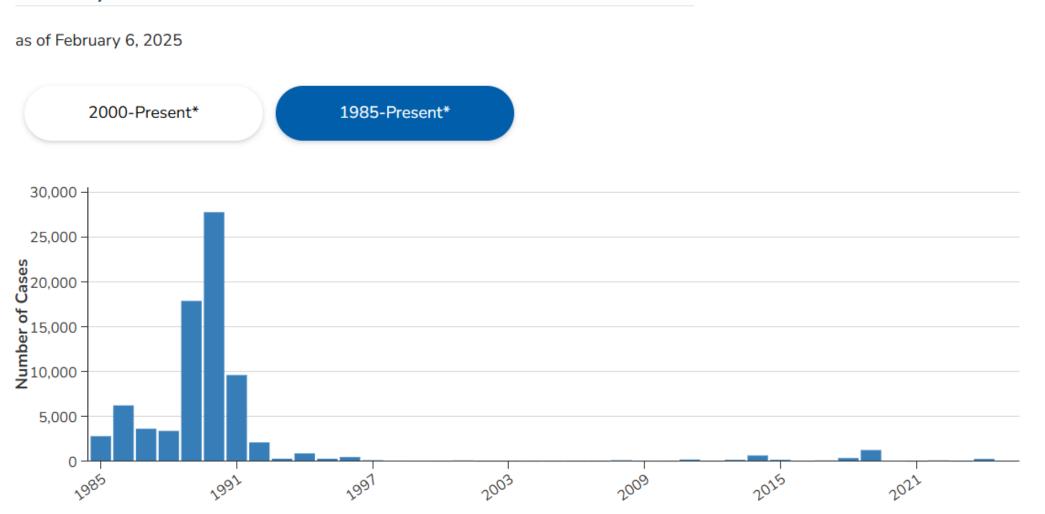
Annual measles notification & vaccine coverage



SOURCE: PUBLIC HEALTH ENGLAND

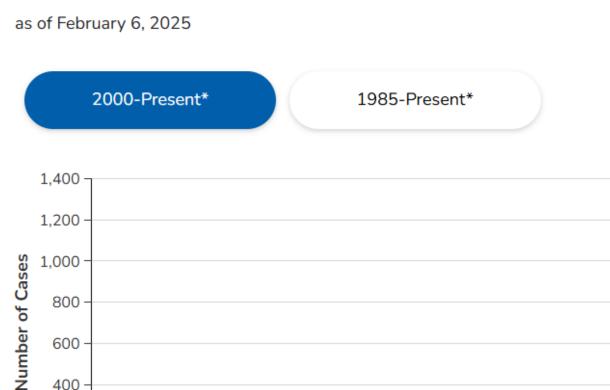
Measles in the US - CDC

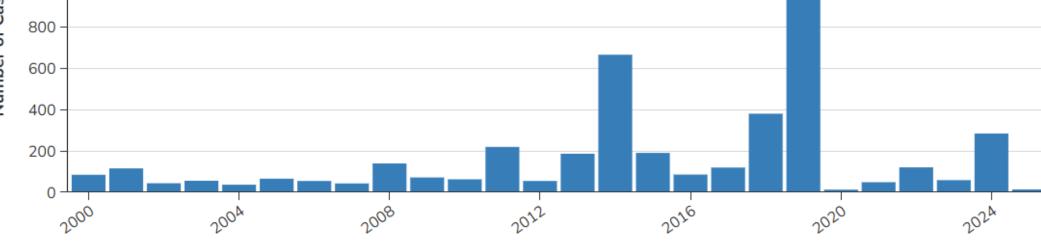
Yearly measles cases



Measles in the US - CDC

Yearly measles cases





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%

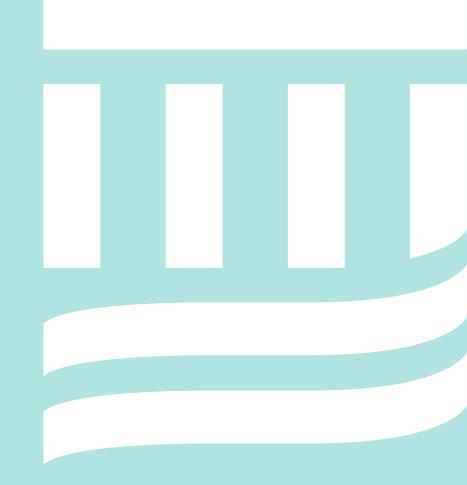
U.S. Hospitalizations in 2024

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)

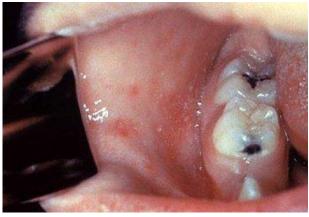
Measles – How Bad Can It Be?



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)
 - $\circ~$ 1 in every 1,000 cases
- Death from acute measles (typically pneumonia or encephalitis)
 - $\,\circ\,$ Still 1-3 of every 1,000 cases in US
 - Washington state July 2015 first measles related death since 2003
 - \circ 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...

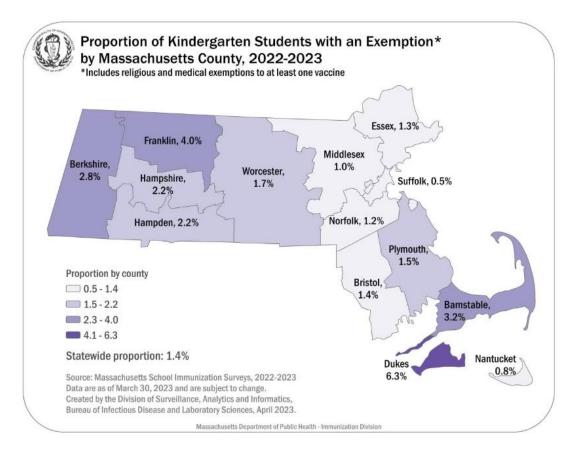
- Patients are contagious 4 days before rash to 4 days after rash
- Airborne transmission
 - \circ Special precautions in hospital
 - $\,\circ\,\,$ Virus can stay in air for 2 hours

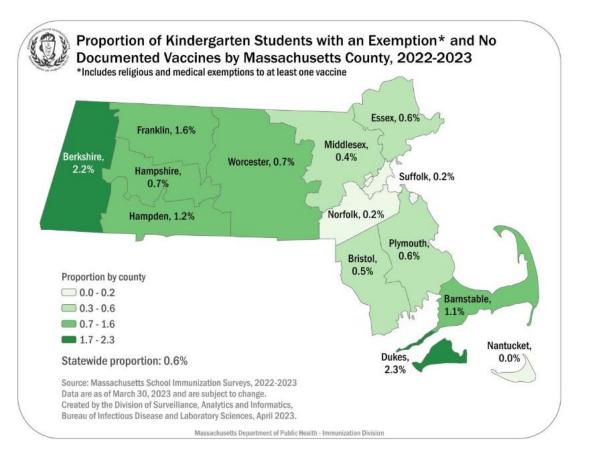
...And Has No Specific Treatment

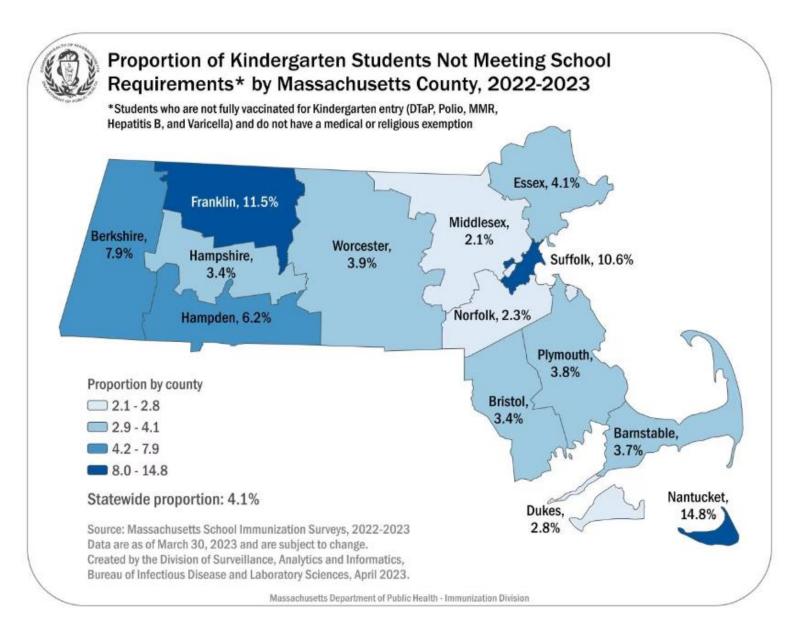
- Exposed patients
 - $\circ~$ Can get vaccine within 72 hours
 - Or immune globulin ("general antibody") within 6 days
- Post-exposure preventive therapy will not provide 100% guaranteed protection
- One antiviral medication (ribavirin) is sometimes used to treat severely ill patients --"off-label," 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	спү	COUNTY	5 DTAP	4 POLIO	2 MMR	3 HEP B	2 VARICELLA	SERIES	EXEMPTION	UN- IMMUNIZEP	NO RECORD	GAP Ţ
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	†	†	†	†	†	t	t	†	†	†
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
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	†
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	†	†	†	†	†	†	†	†	+	†
KITTREDGE	PUBLIC	HINSDALE	BERKSHIRE	†	†	+	†	†	t	t	†	+	+
	DUBLIC	ANECROPOLICH	DEDKOULDE	+	+	+	+	+	+	÷	÷	+	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 <u>https://www.nbcnews.com/health/health-news/measles-outbreak-traced-unvaccinated-border-staffers-n607241</u>)

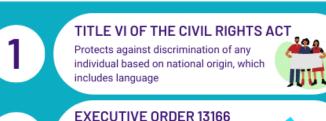
Helpful Resources

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



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?

3

Access: Translating Immunization Records

• Vaxref

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

DEPARTMENT OF HEALTH

VaxRef Form

Translate: English -

* Asterisk (*) Indicates required field

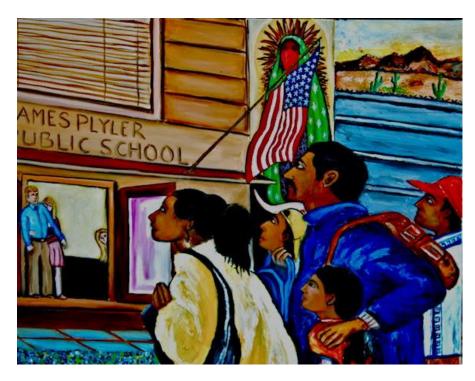
Please select the language from the dropdown menu above that matches the vaccine record. This application will translate your vaccine records to English. You should always give the original immunization records with the translated materials to your doctor or other health care professionals. • New Mexico 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.
- **Table 2: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

Common mild side effects after getting a COVID-19 vaccine may include:



- 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.

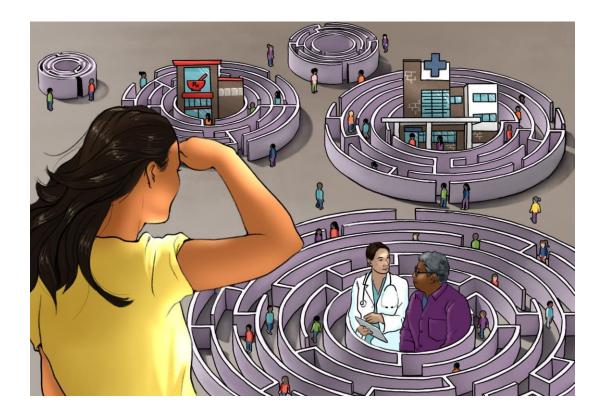
Cultural Competence vs Cultural Humility



- 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 oun byenveni នេងលុលជាឧមុខមិនក្លាល់សំ រីភិមិទោរ និងលាយមានអនិងនាយ ស្រ

Community Care All Are Welcome!

Brigham





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





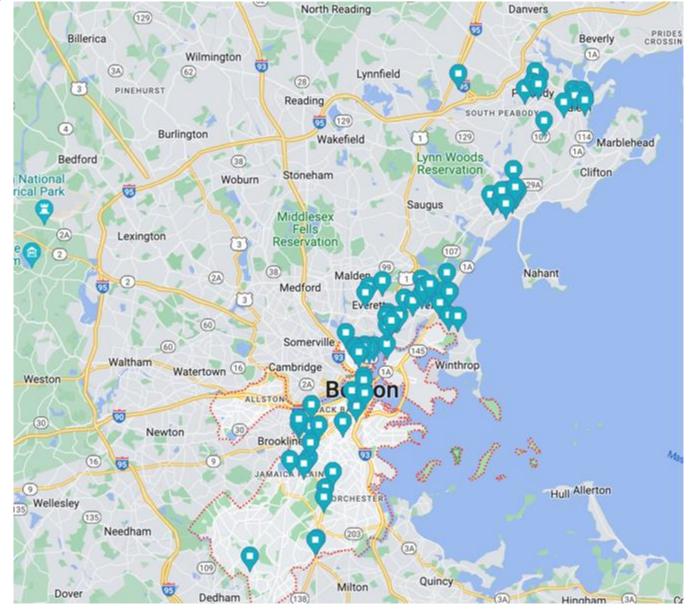




https://youtu.be/O69xKAuKzbw



Community Partners

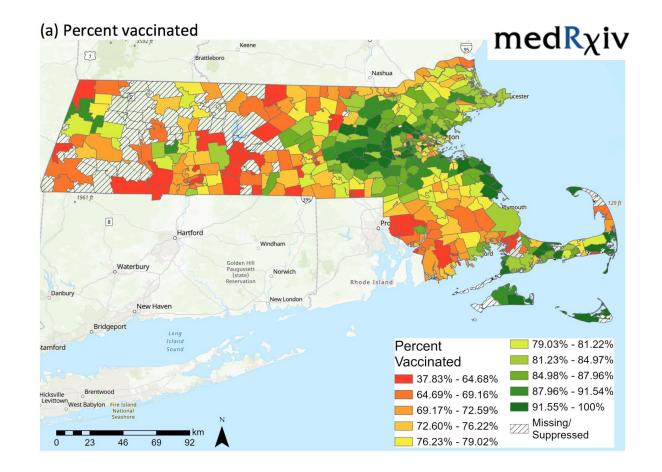






Wide disparities in COVID-19 vaccination coverage exist across local geographic scales

Inequities in COVID-19 vaccine and booster coverage across Massachusetts Zip codes: Large gaps persist after the 2021/22 Omicron wave



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.



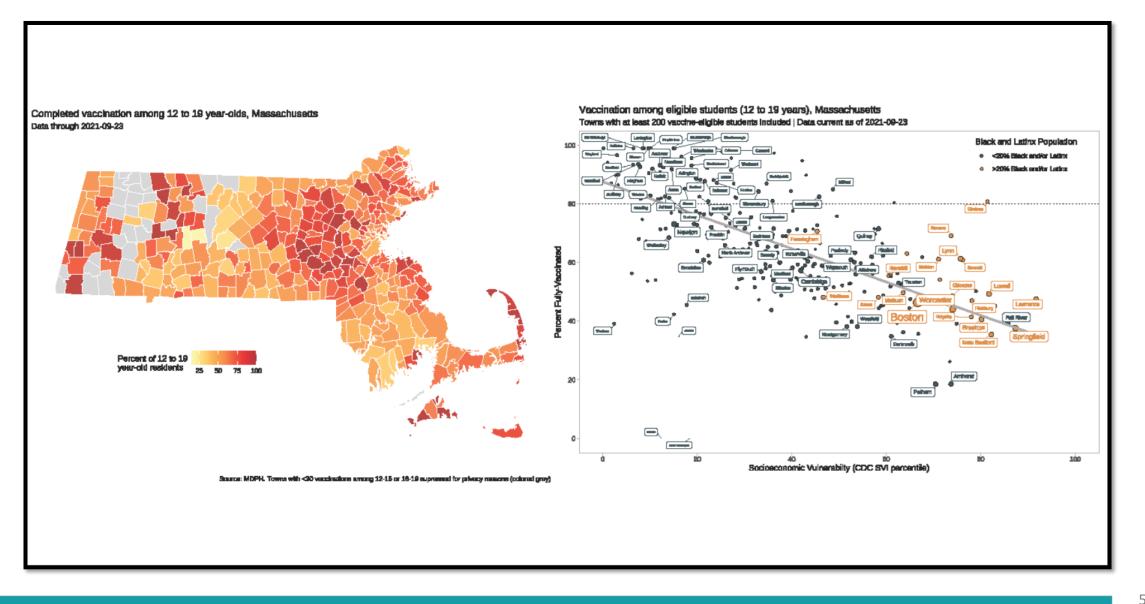
Health care professionals at a Mass. General vaccination van parked near the La Colaborativa food pantry administered COVID-19 vaccines and tests for residents during a mini-festival for teens in Chelsea, Mass., on Oct. 06. NATHAN KLIMA FOR THE BOSTON GLOBE/THE BOSTON GLOBE

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



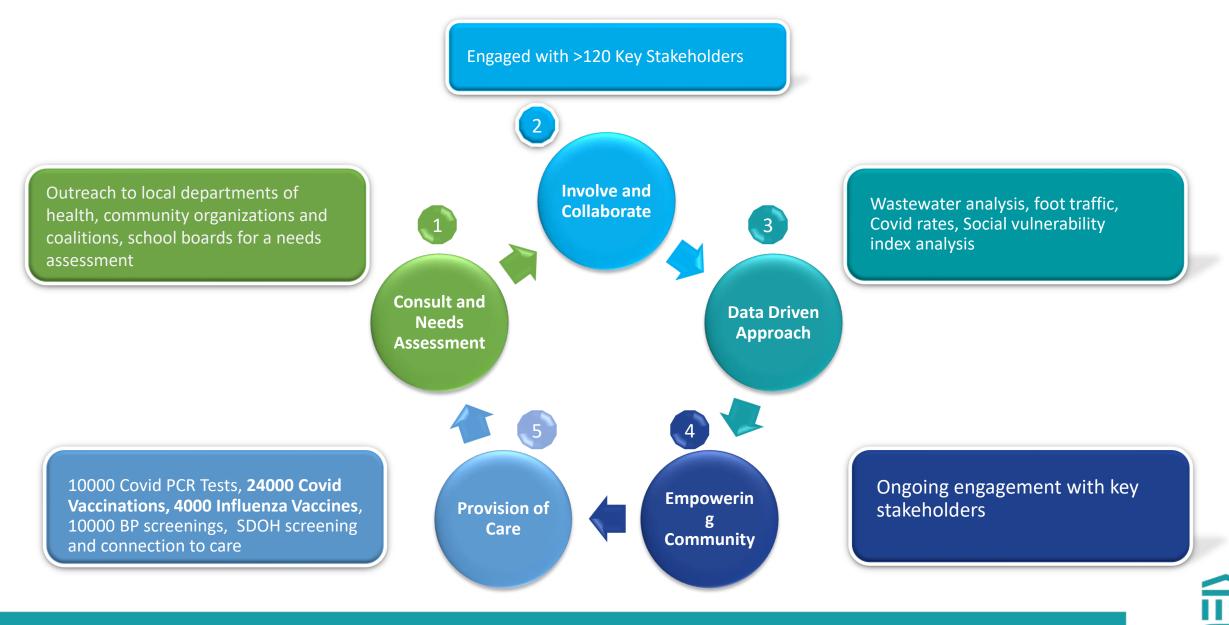


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KEY STAKEHOLDER ENGAGEMENT







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!

