

# **Understanding Current COVID-19 and HPV Vaccination Challenges**

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**January 26, 2023**

# Conflicts of interest

I have no conflicts of interest to disclose

# Learning objectives

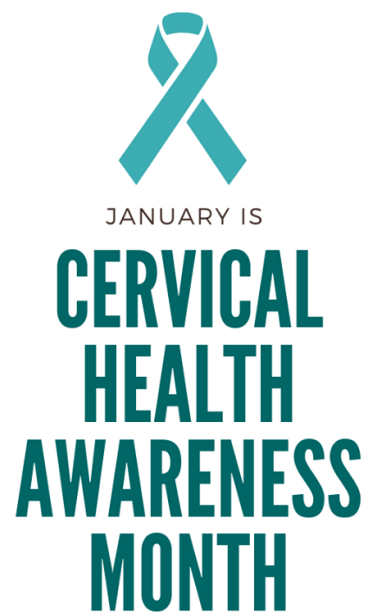
- Describe similarities between HPV and COVID-19 vaccine challenges
- Discuss current issues related to HPV and COVID-19 vaccine hesitancy
- Describe local efforts to address adolescent vaccine hesitancy

## Goal

- Provide evidence-based approaches to tackling vaccine hesitancy in clinical practice

# **Background information: HPV and COVID-19 vaccines**

# Why now?



## Boston Doctors Explain 'Dramatic Uptick' in COVID Wastewater Levels as XBB Subvariant Spreads

Rising levels of COVID-19 in Massachusetts wastewater data comes on the heels of the holidays and as the new omicron subvariant XBB continues to spread across the region


By **Mary Markos** • Published January 3, 2023 • Updated on January 9, 2023 at 10:53 am



PREVENTING CHRONIC DISEASE  
PUBLIC HEALTH RESEARCH, PRACTICE, AND POLICY

### Challenges to Adolescent HPV Vaccination and Implementation of Evidence-Based Interventions to Promote Vaccine Uptake During the COVID-19 Pandemic: "HPV Is Probably Not at the Top of Our List"

[Print](#)

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## Current rates: HPV vaccination<sup>1</sup>

- HPV vaccination, up-to-date, Massachusetts, ages 13-17
  - 78% females
  - 72% males
- HPV vaccination, up-to-date, United States, ages 13-17
  - 64% females
  - 60% males

\*NIS-Teen data, 2021

## Current rates: COVID-19 vaccination, Massachusetts, January 11, 2023<sup>2</sup>

Age group	Fully vaccinated?	Received booster?
0-4	14%	--
5-11	54%	32%
12-15	80%	45%
16-19	75%	55%

# Current HPV + COVID-19 Vaccine Recommendations

- HPV<sup>3</sup>
  - 2 doses for 9 to 14 year olds (0, 6-12 months)
  - 3 dose if series initiated at age 15 (0, 1-2, 6 months)
- COVID-19<sup>4</sup>
  - Primary series (4-8 weeks between doses) and bivalent booster (at least 8 weeks following completion of primary series)



# **Similarities between HPV and COVID-19 vaccinations in pediatric populations**

# **Why talk about HPV and COVID-19 vaccines together?<sup>5</sup>**

- Multi-dose adolescent vaccines with low rates for second and third doses
- Unable to rely on vaccine mandates
- Politicization of vaccines
- Strongly affected by mis- and dis-information on social media

# Growing vaccine hesitancy fueled by social media

- Vaccine hesitancy=top 10 threats to global health
  - “We’re not just fighting an epidemic; we’re fighting an infodemic.”
- Concerns about HPV vaccine safety rising<sup>6</sup>

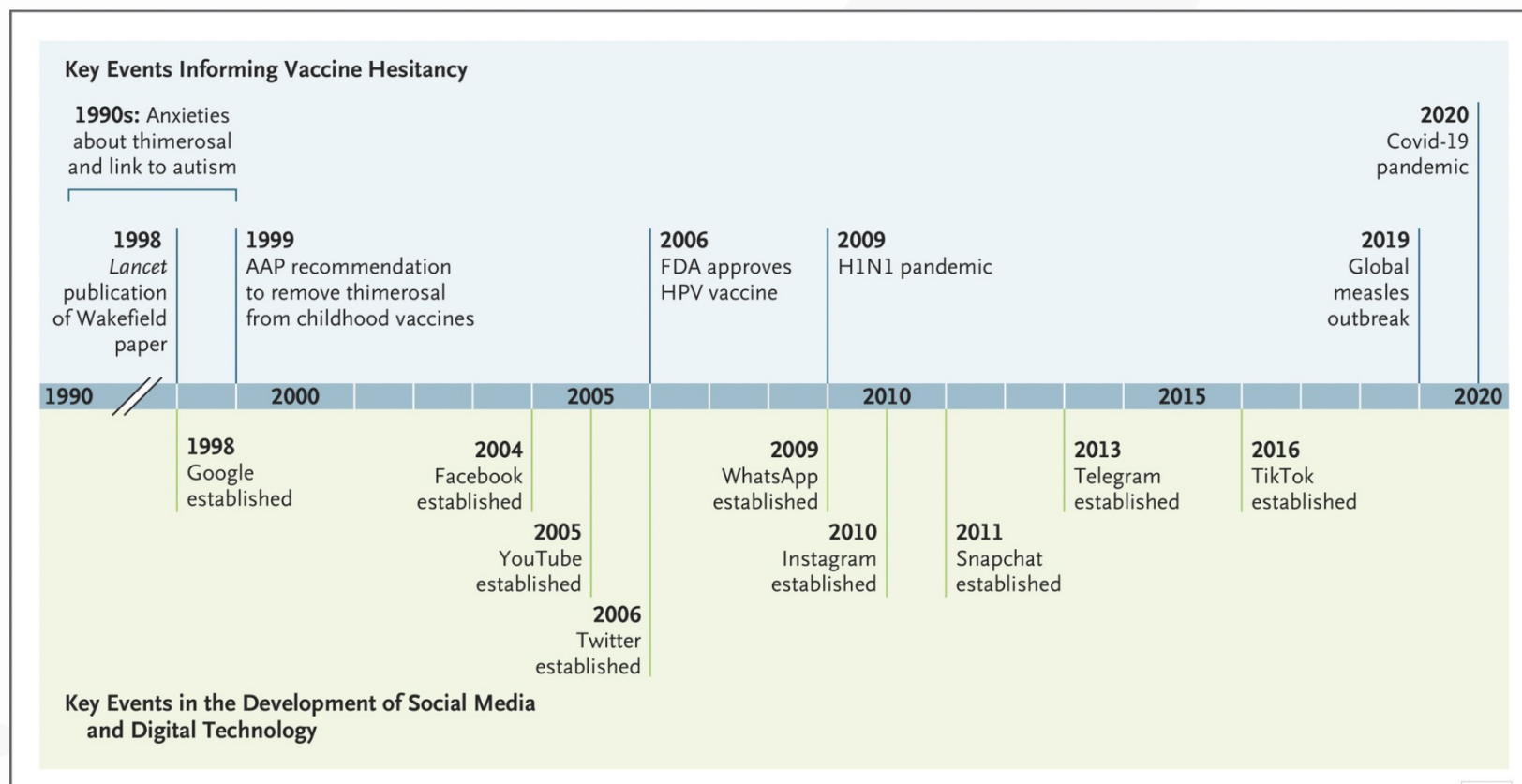
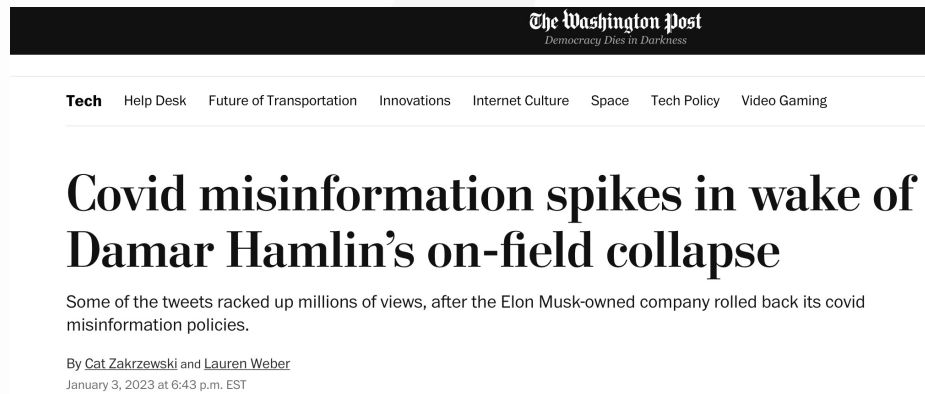


Figure from: Larson HJ, Gakidou E, Murray CJL. The vaccine-hesitant moment. *N Eng J Med*. 2022;387:58-65. <sup>7</sup>

# Mis- and dis-information on social media

- **Misinformation:** false or inaccurate information
- **Disinformation:** deliberate and malicious



HPV vaccine "Death risk from this vaccine according to Merck's own studies is 37 times the risk of dying from cervical cancer."



childrenshealthdefense.org

RFK, Jr.: Gardasil "The Science" Video and Other Facts

This must-watch video details the many problems with the development and safety of Merck's third-highest grossing product, Gardasil. The video is full of ...

# **Local research and community efforts on pediatric HPV and COVID-19 vaccine hesitancy**

# **Survey of Massachusetts pediatricians about COVID-19 and HPV vaccination**

- Recruited in partnership with MCAAP in Summer 2022
- Online survey about:
  - COVID-19 vaccination status for self and child
  - Current practices for COVID-19 vaccine delivery and COVID-19/HPV vaccine recommendation
  - Common reasons cited by parents hesitant about COVID-19 and HPV vaccination

## Results: Demographics (n=109)

		N (%)
Primary place of practice	Pediatric outpatient	83 (76.1)
	Family/internal medicine	5 (4.6)
	Community Health Center	8 (7.3)
	Academic medical center	12 (11.0)
Credentials	MD	101 (92.7)
	DO	5 (4.6)
	PhD	1 (0.9)
	NP	1 (0.9)
Gender	Male	28 (25.7)
	Female	78 (71.6)
	Non-binary	2 (1.8)
Race/Ethnicity	Asian	20 (18.3)
	Black/African American	4 (3.7)
	White	86 (78.9)
	Hispanic	3 (2.8)

# Massachusetts pediatricians got themselves and their children vaccinated as soon as possible

Personal vaccination behavior	Got vaccinated right away	106 (97.2)
	Waited, but are now vaccinated	2 (1.8)
For parents with children ages 5-11: vaccination status	Got child vaccinated as soon as possible	28 (96.5)
	Still waiting	1 (3.5)
For children ages 12 to 17: vaccination status	Got child vaccinated as soon as possible	23 (100.0)



# HPV and COVID-19 vaccine practices

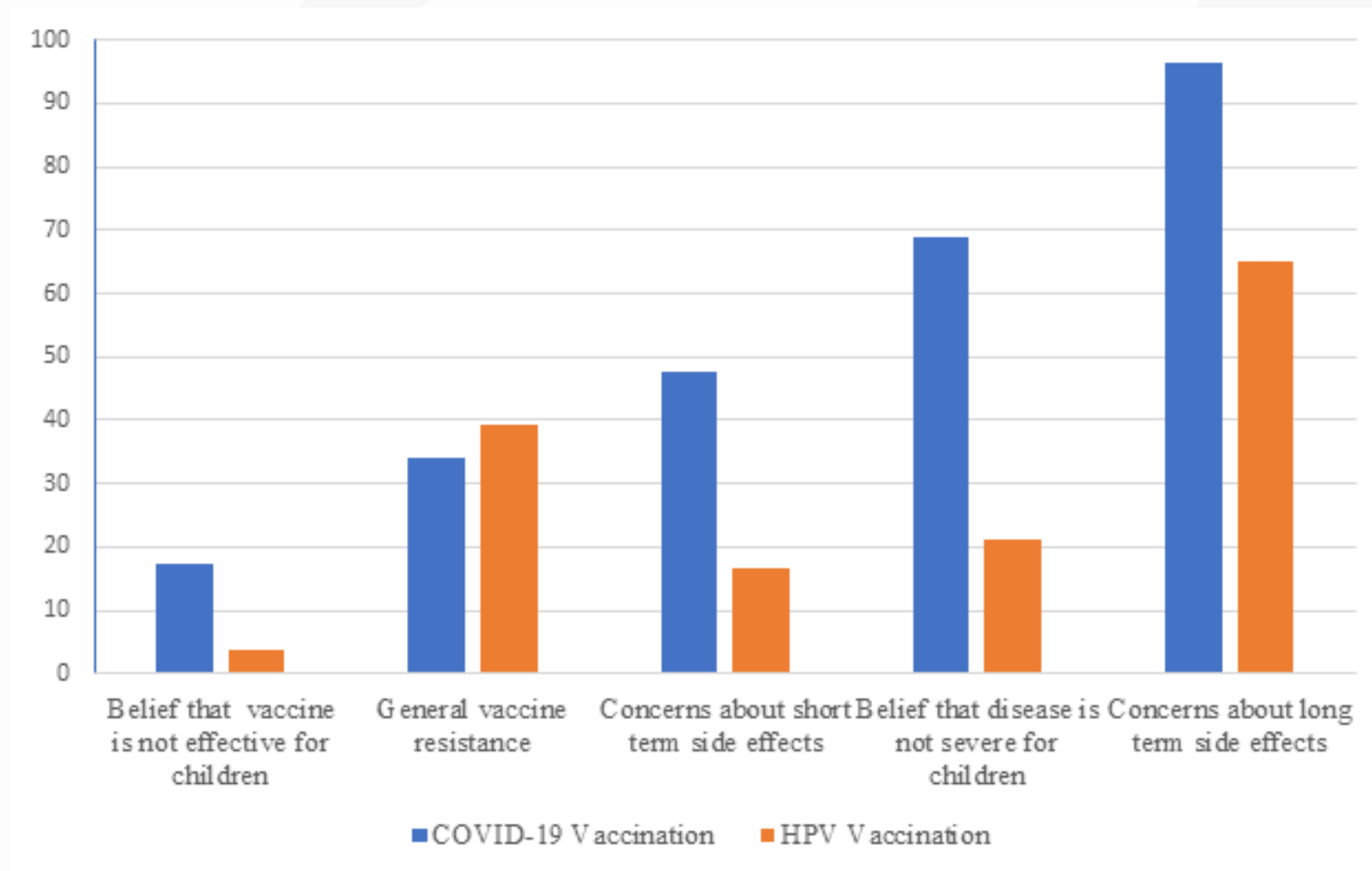
Survey item	Response option	N(%)
How often do you <i>recommend the COVID-19</i> vaccine to eligible pediatric patients?	Always	87 (79.8%)
How often do you <i>recommend the HPV vaccine</i> to eligible patients?	Always	99 (90.8%)
I am confident that I can <i>respond to parental hesitancy about COVID-19 vaccination</i> for children between ages 5 and 17.	Strongly agree	47 (43.1%)
I am confident that I can <i>respond to parental hesitancy about HPV</i> for children between ages 9 and 17	Strongly Agree	79 (72.4%)

# HPV and COVID-19 recommendations

		Have a child between ages 5 and 17	Do not have a child between ages 5 and 17
		N(%)	N(%)
I am confident that I can respond to parental hesitancy about COVID-19 vaccination for children between ages 5 and 17.*	Strongly agree	13 (29.6)	34 (54.0)
I am confident that I can respond to parental hesitancy about HPV for children between ages 9 and 17.*	Strongly Agree	26 (59.1)	53 (82.8)

\* Statistically significant difference,  $p < .05$

## Results: Similarities in reasons for resistance



## **Implications: Where to focus time in clinic visits on vaccine hesitancy?**

- Long-term side effects and overall vaccine confidence
- Share local data
  - Almost 100% of pediatricians got themselves and their children vaccinated against COVID-19

# **Clinic-level intervention: COVID-19 vaccine hesitancy**

## **Example from Massachusetts: CONFIDENCE Intervention**

- Low touch, multicomponent intervention to support pediatric practices with COVID-19 vaccination uptake
  - Integrates: Strong recommendation, sharing personal stories, and motivational interviewing
- Small pilot test in Spring 2022

# CONFIDENCE: Counseling Algorithm

## CONFIDENCE:

Clinicians For Effective  
COVID-19 Vaccine  
Conversations for Youth  
and Adolescents



### RECOMMEND

Start by strongly recommending the vaccine at every encounter with parents of pediatric and adolescent patients.

### SHARE

Share *your* personal vaccine story in your conversation with parents.

### ASSESS

Assess whether the parent is **hesitant** or **resistant** using an open-ended question.

There are different strategies for talking with hesitant versus resistant parents.

### EMPATHIZE WITH HESITANT PARENTS

Focus on empathetic language and listening to their concerns. Use open-ended questions to explore motivations and ask before sharing information.

OR


### EXPLORE REASONS FOR RESISTANCE

Listen to what the parent has to say and re-state their concerns without criticism. Ask before sharing information and plan to revisit the topic at another appointment.

### HONOR PARENT'S AUTONOMY

**PERSISTENCE IS CRITICAL: DISCUSS VACCINATION AT EVERY VISIT**

# CONFIDENCE: Poster Campaign



**Get the COVID-19 Vaccine Here!**


The [redacted] offers COVID-19 vaccinations to all our eligible patients and family members at **every** visit. We also recommend getting a **yearly** influenza vaccine!

**“I got my children vaccinated to keep them safe at school, visit my mom, and to protect my entire family! One of my children was in the COVID-19 vaccine trial when he was 17. My oldest was 2 months old when he was in the trial for the pneumococcal vaccine. I wanted him to get as much protection as possible.”**



**Where can you find us?**

**Clinic Hours & Contact**  
Monday - Friday: 8 am – 5 pm  
774-442-2853

**ALL vaccines are administered by medical professionals!**



Check out our COVID-19 resources!

**Get the COVID-19 Vaccine Here!**


The [redacted] offers COVID-19 vaccinations to all our eligible patients and family members at **every** visit. We also recommend getting a **yearly** influenza vaccine!

**“It's important for anyone who can get vaccinated to get vaccinated! Children especially need to get vaccinated so schools can stay open, and activities can continue to happen.”**


**Where can you find us?**

**Clinic Hours & Contact**  
Monday - Friday: 8 am – 5 pm  
774-442-2853

**ALL vaccines are administered by medical professionals!**



Check out our COVID-19 resources!





# CONFIDENCE: Parent-facing materials



## FACTS ABOUT COVID-19 VACCINATION FOR CHILDREN AGES 5 TO 11

January, 2022

**I've heard that COVID-19 doesn't affect kids as much, why should I get my child vaccinated?**

- Over 6 million children in the United States have been infected by COVID-19. Most infections are mild, and the children fully recover. But, some children have gotten really sick and even died from COVID-19.
- Children who have mild or severe disease can develop "long COVID" where the infection causes long-term health problems.
- Even if your child doesn't get very sick, they can easily spread COVID-19 to others and they will miss out on school and other activities!
- Vaccines are important to make sure children can go to school and activities, play sports, and see their friends!

**What is the recommendation for COVID-19 vaccination for children ages 5 to 11?**

- Children should receive 2 doses of the Pfizer-BioNTech vaccine. The second dose should be 3 weeks or more after the first dose. Three doses are recommended for children who are immunocompromised.
- The dose is smaller than the dose for teens and adults, but it is the same vaccine.

**Is the COVID-19 vaccine effective and safe for children ages 5 to 11?**

- Yes. The Pfizer-BioNTech vaccine was studied in a clinical trial of more than 2,200 children. In the clinical trial, the vaccine was 90% effective in preventing symptomatic cases of COVID-19. No serious side effects were observed.
- Over 4.8 million children of ages 5-11 have safely received at least one dose.

**I heard these vaccines were developed quickly. Should I be nervous about getting this vaccine for my child?**

- No. The COVID-19 vaccines went through rigorous clinical trials and FDA approval process. No steps were cut.
- Scientists have worked on the technology for these vaccines for decades. We already had a lot of important data before the pandemic started.

**Does my child need to keep wearing a mask after getting vaccinated?**

- The CDC recommends wearing a mask in areas where there are a lot of COVID cases, even if you are vaccinated.
- Towns, schools, and businesses may have their own rules about wearing masks. It's best to pay attention to local and state recommendations about where to wear a mask.



**Should my child get vaccinated if they have already had COVID-19?**

- Yes! It is possible to be reinfected after having COVID-19.
- Getting vaccinated after having been infected with COVID-19 will give your child a greater level of protection.

## **CONFIDENCE: Preliminary results and next steps**

- Providers reported that this approach fit into existing practice and was easy to implement<sup>8</sup>
  - +11% parental satisfaction with conversation about COVID-19
  - +17% reported same-day COVID-19 vaccination
- Larger trial in progress
- Potential applications to other vaccines?

# **Community-level efforts: COVID-19 vaccine hesitancy**



# Community-level outreach: Worcester, MA



**"I'm vaccinated. For my mom, for my dad, for my grandmother...For myself. I love them, so I want to protect them. Protect yours!"**

— Joan Herrera, Age 19  
Worcester Youth Vaccine Ambassador  
North High School C/O 2020  
Favorite Neighborhood: Plumley Village



@PostVaxLife



## Questions about the vaccine or vaccine clinics?

Call the Worcester Department of Health and Human Services Mobile Clinic at 508-868-6438. Or visit <http://www.worcesterma.gov/coronavirus/vaccination> for more information about vaccines in Worcester.

**FREE COVID-19 Vaccines in Worcester Available at these Walk-In Clinics:**

**ALL vaccines administered by medical professionals!**

- Aids Project Worcester, 165 Southbridge Street: Fridays from 1 – 4 PM
- Edward M. Kennedy Community Health Center, 19 Tacoma Street: Mondays - Fridays, 8 AM - 1 PM
- UMMHC Mercantile Center, Front Street: Mondays, 11 AM - 4 PM; Tuesdays, 10 AM - 3 PM; Thursdays, 10 AM - 3 PM
- Worcester Public Library's Main Branch, 3 Salem Square: Wednesdays, 11 AM - 7 PM; Saturdays, 11 AM - 5 PM

## How to Talk With Parents About COVID-19 Vaccinations for Their Children:

### What Worcester Parents Are Saying

Lessons learned from parents of children of ages 5-11, 2021-2022, Worcester, Massachusetts



### Focus Group Methods

The UMass Worcester Prevention Research Center of UMass Chan Medical School held seven virtual focus groups with 67 parents in Worcester, Massachusetts between 10/27/2021-1/21/2022. Four groups were held in English, and three in Spanish.

Participants were invited to participate by social media and by community partners at El Buen Samaritano Food Pantry, the YMCA of Central Massachusetts, and the Parents Union of Massachusetts (PUMA).

Parents were asked a series of open-ended questions so they could share their thoughts and feelings on the COVID-19 vaccines for their children.

This is supported by Cooperative Agreement U48DP006381 from Centers for Disease Control and Prevention. Findings are of the authors.

### Key messages about COVID-19 vaccines should emphasize & highlight:

- Personal experiences of doctors and experts choosing to vaccinate their own children.
- Vaccines provide PROTECTION and SAFETY against COVID-19.
- The risks from COVID-19 infection are far greater than risks associated with vaccination.
- Vaccines help children return to normal/socialize with friends.
- Vaccines are effective in preventing hospitalization and severe disease.

### Parents state that they trust:

Their child's pediatrician/doctor and other parents.

### Parents say...

**" I want to hear that they're vaccinating their kids. Like, we know our pediatrician...we see him at the soccer field...that would make me feel great hearing, you know, this is something I am doing for my own kids. "**



Contact: [umwpr@umassmed.edu](mailto:umwpr@umassmed.edu)

### Parents want to hear:

#### FROM PEDIATRICIANS AND OTHER PROVIDERS:

- The benefits of vaccination, including lessening severity of disease and decreasing disruption of school.
- Advice and guidance regarding side effects (short & long-term), speed of vaccine development, dosing.
- Decisions that pediatricians have made in vaccinating their own children and reasons for these decisions.

#### Parents say...

**" I would like to hear hypothetically my PCP say, I vaccinated 1000 children and there has been zero side effects some—something along those lines "**

#### FROM OTHER PARENTS:

- Reasons why they decided to vaccinate their own children.
- Stories & personal experiences with the COVID-19 vaccines

#### Parents say...

**" We would like to see cases of children who have already been vaccinated, and how they have reacted. "**

#### Parents are most concerned about:

- Effectiveness and safety of the vaccine.
- Potential side effects and long-term effects of the vaccines, such as myocarditis.
- Changing messages, recommendations, guidelines.
- The correct dosing of the vaccine for a child's age and size.

# **Conclusions: evidence-based strategies to tackle vaccine hesitancy in clinical practice**

# What strategies *do* work?

- Strong, presumptive recommendation<sup>9</sup>
  - “Your child is due for these vaccines today”
- Sharing personal stories
  - Parents want to hear them<sup>10</sup>
  - Providers reported that these seem to be effective for COVID-19<sup>11</sup>
  - Evidence of this strategy from HPV vaccination research<sup>12</sup>
- Motivational interviewing<sup>13,14</sup>

# What strategies *do* work?

- Identify and correct misinformation<sup>15</sup> and target the “moveable middle”
- Take advantage of every visit to offer vaccines to avoid missed opportunities<sup>16,17</sup>
- Vaccinate as soon as eligible
  - HPV start at age 9 (AAP + ACS endorsed)
  - COVID-19 at 6+ months

# What can public health and local communities do?

- We need multi-level, multi-component strategies to promote vaccine confidence
  - Pediatricians are a big part of these efforts, but they need reinforcement
    - Local community champions
    - Create community norms around vaccine uptake
    - Consistent, coordinated communication



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## Other resources:

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# Questions?

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