Strengthening Vaccine Confidence in Pediatric and Family Practice Offices During the COVID-19 Pandemic

August 19, 2020
Housekeeping Items

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- The slides are available for download in the “Handouts” section of your control panel.
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- This webinar is being recorded and will be archived. The archive will be made available following the webinar.
Today’s Presenters

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Polls: Tell us a little about yourself!
Vaccine acceptance remains high among U.S. parents

High vaccination coverage results in substantial reductions in morbidity and mortality

- Nearly 99% of children receive any vaccines by age 2 years.
- Over 94% of kindergartners have received state-mandated vaccines for school entry.

Complacency and vaccine concerns increasing

Parents vaccinating their children is important: 94% in 2001, 89% in 2019.

Heard about advantages of vaccination: 73% in 2001, 84% in 2019.


Vaccines are more dangerous than the diseases they prevent: 6% in 2001, 11% in 2019.

Source: Gallup, Inc. 2019
Vaccine delays or refusals a growing concern

- Nearly **one-quarter** of young children vaccinated according to an alternative schedule.

- **2.5%** of kindergartners have a vaccine exemption.
  - Rate slightly increasing over time

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Vaccine hesitancy: a continuum

- Vaccine hesitancy encompasses:
  - Delay or refusal of vaccines despite the availability of vaccination services
  - State of doubt or indecision around vaccination, even among parents who accept vaccines

How common is vaccine hesitancy among U.S. parents?

- Routine childhood vaccines: 6%
- Influenza vaccine: 26%

Why are some parents hesitant to vaccinate?

Questions, concerns, and perceptions about vaccines from some U.S. parents

Vaccine skepticism higher in certain groups

U.S. adults who say the benefits of MMR outweigh risks

Education
- College graduate, 93%
- High school or less, 83%

Income
- Upper, 95%
- Lower, 81%

Race/ethnicity
- White, 92%
- Hispanic, 78%
- Black, 74%

Overall, 88%

Pew Research Center, 2019 (collected October 2019). Income bracket: Refers to adjusted family income level
Vaccine access issues and disparities persist

≥1 MMR dose by age 2 years

- State
- Insurance status
- Poverty level
- Race
- MSA status

- Lowest
- Private
- Medicaid
- At or above
- Below
- Asian
- White
- Non-MSA
- MSA Principal City

Up to date on HPV vaccine among 13-17 year-olds

- Lowest
- Private
- Medicaid
- At or above
- Below
- White
- Black
- Hispanic
- Non-MSA
- MSA Principal City

MMR: Measles, mumps, rubella vaccine; HPV: human papillomavirus vaccine; MSA: Metropolitan statistical area

High coverage needed in all communities to protect against vaccine-preventable diseases

Lessons from the 2018-2019 measles outbreak in New York

Global resurgence of measles

Geographic disparities in measles coverage

Importations of measles to U.S.

Pockets of undervaccination

Vaccine misinformation

Largest measles outbreak in nearly 30 years

Strengthening vaccine confidence and acceptance

Where do we go from here?
Vaccinate with Confidence is CDC’s strategic framework for strengthening vaccine confidence and preventing outbreaks of vaccine-preventable diseases in the United States.
Responding to dynamics shared by recent outbreaks

- Pockets of low vaccination
- Vaccine access
- Myths & misinformation
Protect communities
Use every tool available to find and protect communities at risk using tailored, targeted approaches.

Empower families
Ensure parents are confident in decision to vaccinate by strengthening provider-parent vaccine conversations.

Stop myths
Use local partners and trusted messengers, establish new partnerships to contain the spread of misinformation, and educate critical stakeholders about vaccines.
Protect communities

Strategy: Protect communities at risk from under-vaccination.

✓ Leverage immunization data to find and respond to communities at risk.
✓ Work with trusted local partners to reach at-risk communities before outbreaks.
✓ Ensure vaccines are available, affordable, and easy to get in every community.
Stop myths

Strategy: Stop misinformation from eroding public trust in vaccines.

- Work with local partners and trusted messengers to improve confidence in vaccines among key, at-risk groups.
- Establish partnerships to contain the spread of misinformation.
- Educate key new stakeholders (e.g., state policy makers) about vaccines.

Social media companies: putting checks on vaccine misinformation
Empower families

Strategy: Get providers and parents effective information resources.

- Expand resources for healthcare professionals to help them have effective vaccine conversations with parents.
- Work with partners to start conversations before the first vaccine appointment.
- Help providers foster a culture of immunization in their practices.
Making the vaccine decision

How pediatric providers can empower families and create a culture of immunization in their practices
What works in vaccine communication?

No single, effective strategy

Toolbox approach

- Team approach
- Presumptive recommendation
- Tailored educational materials
- Motivational interviewing
- Reminder/recall systems
- Building trust
Using a whole-team approach to vaccine communication

- **All** staff play a role in vaccine communication.

- Healthcare providers who feel confident in vaccines are more likely to recommend them to patients.

- Ensure staff has access to:
  - Up-to-date information on vaccine recommendations
  - Access to clinical resources and trainings on vaccination
  - Answers to their own questions about vaccines

Consistent messages on the importance of vaccines throughout the visit and beyond

- Remind parents that vaccines are due
- Vaccine Information Statements (VISs)
- Vaccine info in new patient packet

- Patient materials and flyers

- Strong vaccine recommendation
- Answering parents’ questions
- Tailored educational materials

- Schedule next vaccine appointment

- Reminder/recall

Check-in
Waiting room
Exam room
Check-out
Between visits
Trust is the foundation for vaccine conversations

- 93% of parents say their child’s provider is most trusted source of vaccine information

- Trust in the provider shown to positively or negatively affect vaccine acceptance

- Building trust early is important.
  - Satisfaction in parents of young infants associated with improved vaccine uptake

**What makes for a trusted provider?**

- Scientific competency
- Spending time with patient
  - Listening, acknowledging, responding to questions or concerns
- Caring disposition
  - Treating patient as an individual

Start conversations early

Use every opportunity to reach parents before the first vaccine visit

- Most mothers make vaccine decisions for their child before or during pregnancy.
  - Parents who refuse vaccines more likely to start thinking about them before child’s birth

- Expectant mothers want more information on vaccines from a pediatric provider.
  - With limited opportunities, frequently turn to the internet, media, or word of mouth

Initiating the conversation: Give a strong recommendation using a presumptive approach

“Joe is going to get vaccines to protect against seven diseases today: diphtheria, tetanus, whooping cough, rotavirus, Hib, pneumococcal disease, and polio”

Presumptive approach

“What do you want to do about Joey’s shots today?”

Participatory approach
Why use the presumptive approach?

- **3- to 5-fold** more effective than participatory approach, even after adjusting for baseline parental hesitancy

- Among parents who resist after a presumptive recommendation, approximately **half** accept vaccines when the provider pursues their initial recommendation.

- Presumptive approach associated with greater parental perceived urgency for vaccination and trust in the information received from the provider

What if parents have questions?

- Even parents who accept vaccines often have questions or concerns and are simply looking for additional information or reassurance.

- When responding to parents’ questions or concerns, share:
  - Personal stories
  - Balanced information on risks and benefits
  - Vaccination as the social norm

- Share educational materials tailored to their questions.

“My aunt had cervical cancer. That’s why I made sure my own teenagers received the HPV vaccine.”

Addressing vaccine myths

**Do**

- Emphasize the fact
- Give alternative explanation to fill the gap
- Provide references

**What about autism?**

Many large studies have found that vaccines do not cause autism.

**How do we know?**

Many good studies have compared the health of large numbers of vaccinated and unvaccinated children over many years and found that vaccinated and unvaccinated children were as likely to develop autism. (References to scientific studies).

**Then what causes autism?**

It is not known exactly why some children develop autism. Current research suggests that autism has many causes. (References to scientific studies).

**Do not**

- Emphasize the myth
- Give no alternative explanation for the potential causes of autism
- Use complex language

**Do vaccines cause autism?**

Medical researchers and scientists around the world have NOT found a link between vaccines and autism.

The study that had initially reported a link between the measles-mumps-rubella (MMR) vaccine and autism was RETRACTED in 2011.

Evidence-based reviews have rejected any casual associations between the MMR vaccine and autism spectrum disorders in children.
Avoid common communication traps

- Persuasion trap
- Data dump trap
- Q and A trap

O’Leary, S. NFID Clinical Vaccinology Course, Mar 2017
Use motivational interviewing techniques

- Patient-centered, guiding communication style for enhancing a person’s own motivation for change or behavioral action

- Through use of motivational interviewing, the provider can:
  - Express understanding of parents’ knowledge and beliefs.
  - Elicit discrepancies between current situation and what the parent desires.
  - Allow the parent to express their own views.
  - Support parents’ confidence in their ability to change.

- Use of motivational interviewing for vaccine communication demonstrated to increase vaccine uptake by 7-10%

Motivational interviewing

- Empathy
- Collaboration
- Evocation
- Support for autonomy
Additional considerations for influenza vaccine

Rethinking influenza vaccine messaging

Why are parents hesitant?
- Perceived low vaccine effectiveness
- Safety concerns
- Perception that influenza vaccine can cause influenza

Communication strategies for flu vaccine
- Focus on burden of influenza in children
- Rebrand influenza as a “routine” vaccine
  - Use the presumptive approach
- Reassure parents of flu vaccine safety
  - Over 170 million doses given annually
- Discuss efficacy of influenza vaccine in preventing severe disease

When a parent refuses vaccines

- Refusal during a visit does not necessarily mean the parent will continue to decline vaccines in the future.

- Maintain rapport with parent to leave the door open to future discussions.

- Before the patient leaves the office, create at least one action item, such as:
  - Scheduling the next visit
  - Providing tailored information to address the parent’s questions
Strengthening vaccine confidence and acceptance

More important than ever
Substantial disruptions to outpatient medical care during COVID-19 pandemic

As number of COVID-19 cases increased and stay-at-home orders implemented, nearly 70% reduction in outpatient in-person visits before starting to rebound.
## Pediatrics among the hardest-hit specialties

*47% cumulative decline in visits from March 15 to June 20, 2020*

<table>
<thead>
<tr>
<th>Specialty</th>
<th>Percent Change in Visits from Baseline</th>
</tr>
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<tbody>
<tr>
<td>Pediatrics</td>
<td>-47%</td>
</tr>
<tr>
<td>Ophthalmology</td>
<td>-47%</td>
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<tr>
<td>Otolaryngology</td>
<td>-47%</td>
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<tr>
<td>Pulmonology</td>
<td>-45%</td>
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<tr>
<td>Dermatology</td>
<td>-42%</td>
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<tr>
<td>Surgery</td>
<td>-41%</td>
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<tr>
<td>Gastroenterology</td>
<td>-41%</td>
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<tr>
<td>Cardiology</td>
<td>-40%</td>
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<tr>
<td>Urology</td>
<td>-39%</td>
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<tr>
<td>Orthopedics</td>
<td>-39%</td>
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<tr>
<td>Allergy/Immunology</td>
<td>-36%</td>
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<tr>
<td>Primary Care</td>
<td>-31%</td>
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<tr>
<td>Oncology</td>
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<tr>
<td>Obstetrics/Gynecology</td>
<td>-28%</td>
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<tr>
<td>Endocrinology</td>
<td>-28%</td>
</tr>
<tr>
<td>Behavioral Health</td>
<td>-23%</td>
</tr>
<tr>
<td>Rheumatology</td>
<td>-21%</td>
</tr>
</tbody>
</table>

Ateev Mehrotra et al., Commonwealth Fund, June 2020.
Disruptions in outpatient medical care among all pediatric age groups during COVID-19 pandemic

Ateev Mehrotra et al., Commonwealth Fund, June 2020.
COVID-19 pandemic and disruptions to routine childhood vaccination


All non-influenza vaccines

Source: CDC
COVID-19 pandemic and disruptions to routine childhood vaccination


Source: CDC
What is the capacity among pediatric providers to administer vaccines?

- Vaccines for Children (VFC) program provides vaccines at no cost to eligible children; ~38,000 enrolled practices encompass ~86% of U.S. pediatricians

- Among 1,933 VFC-enrolled practices, the majority are currently open, offering vaccines, and able to accept new patients (as of May 20, 2020),

  - 90% Open*
  - 96% Offering vaccines*
  - 59% Accepting new patients*

  *62% have reduced hours
  *Among open practices; 81% offering vaccines to all patients
  *Through August 1st

Immunization infrastructure remains strong during COVID-19
Conclusions from survey of VFC providers

- As of May 2020, immunization infrastructure sufficient to meet patient needs and ensure catch-up vaccination, though some access issues remain

- Majority of providers will be able to administer vaccines during the critical back-to-school period.

- To help ensure routine childhood vaccination services get back on track, efforts needed to support providers and parents

CDC activities with immunization programs and partners to support routine childhood vaccination

- **Monitor** vaccination service delivery to inform targeted interventions.

- **Support**
  - Providers through the development of guidance and support materials
  - Immunization programs in identifying and responding to disruptions in vaccination
  - Catch-up vaccination through reminder/recall systems
  - Access to vaccines by identifying gaps in VFC provider network
  - Identification of policy interventions to support healthcare providers

- **Communicate**
  - Importance of vaccination to parents, providers, and partners
  - Information on VFC program to families

- **Plan** back-to-school vaccination activities during the summer and influenza vaccination in the fall.
Routine immunization services remain critical

- Routine vaccination prevents illnesses that lead to increased medical visits and hospitalizations, further straining the healthcare system.

- Influenza vaccination will be critical to reduce the impact of respiratory illnesses and resulting burdens on the healthcare system.

https://www.cdc.gov/vaccines/pandemic-guidance/index.html
Routine vaccination across the lifespan

- **Children and adolescents:** Reschedule missed well-child visits and/or vaccinations.
  - Start with newborns, infants, and children up to age 24 months, young children, and extending through adolescence.

- **Pregnant women:** If vaccination has been delayed, administer vaccines during the next in-person appointment.

- **Adults:** Administer all recommended vaccines.
  - Especially important in older adults and those with underlying conditions

Decreasing immunization rates mean it is particularly important to:

- Assess the vaccination status of all patients to avoid missed opportunities and ensure timely vaccination catch-up.

- Administer all vaccines due or overdue according to the recommended [CDC immunization schedules](https://www.cdc.gov/vaccines/pandemic-guidance/index.html) during each visit.

[Diagram ofChild and Adolescent Immunization Schedule (birth through 18 years)]

[Diagram ofAdult Immunization Schedule (19 years and older)]
Catch-up vaccination strategies

Reminder/recall systems
Forecasting through EMR or IIS
Standing orders

Vaccine administration during the COVID-19 pandemic

- Vaccination in the medical home ideal to ensure patients receive other preventive services that may have been deferred.

- Regardless of vaccination location, best practices for storage and handling of vaccines and vaccine administration should be followed.

- Information on vaccines administered should be documented so that providers have accurate and timely information and to ensure continuity of care in the setting of COVID-19-related disruptions.

https://www.cdc.gov/vaccines/pandemic-guidance/index.html
Vaccination of persons with confirmed or suspected COVID-19

- Routine vaccination should be deferred in persons with confirmed or suspected COVID-19, regardless of symptoms.

https://www.cdc.gov/vaccines/pandemic-guidance/index.html
Follow CDC guidance to prevent the spread of COVID-19 in healthcare settings

- Screen patients for COVID-19 symptoms before and during visit.
- Ensure social distancing (at least 6 feet apart, where possible).
- Limit and monitor facility points of entry and install barriers to limit physical contact with patients at triage.
- Implement policies for cloth face masks for persons aged ≥2 years (if tolerated).
- Ensure adherence to respiratory hygiene, cough etiquette, and hand hygiene.
- Enhance surface decontamination.

Practices for the safe delivery of vaccination services during the COVID-19 pandemic

- Follow general CDC guidance to prevent spread of COVID-19 in healthcare settings, including outpatient and ambulatory care settings.

**Personal protective equipment**

- **Face mask**
  - **Recommended**: All healthcare providers
  - **N95 masks not recommended**

- **Eye protection**
  - **Recommended**: Areas of moderate/substantial community transmission
  - **Optional**: Areas of minimal/no community transmission

- **Gloves**
  - **Recommended**: Intranasal or oral vaccines
  - **Optional**: Intramuscular or subcutaneous vaccines

Ensure physical distancing during vaccination visits

Separate sick from well patients

- Schedule well and sick visits at different times of the day
- Place sick visits in different areas of the facility or different locations

Ensure physical distancing measures

- At least 6 feet during all aspects of visit: check-in, checkout, screening procedures, postvaccination monitoring
- Use strategies such as physical barriers, signs, ropes, floor markings

Reduce crowding in waiting room

- Ask patients to wait outside (e.g., in their vehicles) until called in

https://www.cdc.gov/vaccines/pandemic-guidance/index.html; Image credit: Noun Project, CDC
Reassure parents through communication

- Encourage parents to return for well-child visits.
- Discuss the safety protocols put in place to ensure patients can be safely vaccinated.

https://www.cdc.gov/vaccines/pandemic-guidance/index.html
Promote awareness of Vaccines for Children (VFC) program among parents

- Prior to the pandemic, ~50% of U.S. children eligible to receive free vaccines through VFC
  - More may be eligible now because of recent loss of insurance.

- Parents of recently eligible children may not be aware of VFC.

- Partners and providers can help improve vaccine access by increasing awareness and enrollment in VFC program.

https://www.cdc.gov/vaccines/programs/vfc/index.html
Back-to-school vaccination

School vaccination requirements provide a critical checkpoint for children’s vaccination status

- Many school-age children at risk for undervaccination and non-compliance with school vaccination requirements

- Important to augment back-to-school vaccination clinics to ensure that children have an opportunity for vaccination
Signs of recovery in routine childhood vaccination

Weekly Vaccines for Children program provider orders for pediatric vaccines – United States, January 13, 2019-August 2, 2020

All non-influenza vaccines

Gap narrowing between 2019 and 2020

Source: CDC

Notable Dates:
1 1/20/2020: First US case reported (Washington state)
2 3/13/2020: US national emergency declared
Resources for communicating with parents about routine vaccination during the COVID-19 pandemic

CDC resources for parents and immunization partners

www.cdc.gov/vaccines/routine
www.cdc.gov/vaccines/partners/childhood/stayingontrack.html

AAP’s #CallYourPediatrician campaign
Conclusions

- Substantial disruptions to routine childhood vaccination services have occurred during the COVID-19 pandemic, though signs of recovery have appeared.

- Immunization programs, partners, and providers can help get childhood vaccination back on track by supporting catch-up vaccination efforts and communicating with parents about safe vaccination during the pandemic.
Other resources for healthcare professionals
#HowIRecommend videos

www.cdc.gov/vaccines/howirecommend
How to create a culture of immunization

- Customizable slide deck
  - Content geared for nurses, medical assistants, and non-clinical office staff
  - Intended for use by physicians or vaccine coordinators during staff meetings or lunch-and-learn presentations
  - Can be customized with an organization’s slide template and logo
  - Health departments can also modify and use during HCP training.

- CDC continuing education course for nurses and medical assistants

www.cdc.gov/vaccines/partners/childhood/professionals.html#presentation-10-ways
www.cdc.gov/vaccines/ed/vaccine-communication/foster-culture-of-immunization.html
Immunization training resources

- **You Call the Shots:** Web-based modules that discuss vaccine-preventable diseases (VPDs) and explain the latest recommendations for vaccine use. CE/CME credit offered.

- **Current Issues in Immunization Webinars:** Live, 1-hour, audio and visual presentations with on-demand replays. Offered 4-5 times per year. CE/CME credit offered.

- **Pink Book Webinar Series:** Online series of 15 1-hour webinars. Provides an overview of the principles of vaccination, general recommendations, immunization strategies for providers, and specific information about VPDs and vaccines. CE/CME credit offered.

- **Webcasts:** Topics include HPV, pertussis, flu, vaccine storage and handling, and more. CE/CME credits offered.

www.cdc.gov/vaccines/ed/
CDC-Medscape CME programs

- Making the Case: Championing for HPV Cancer Prevention in Your Practice
  https://www.medscape.org/viewarticle/898084

- Medscape CME: Pediatric Immunization: Navigating Difficult Conversations with Parents
Other resources for parents
Infant immunization resources

www.cdc.gov/vaccines/parents/resources/childhood.html
Infant immunization FAQs

- Written for parents of children ages 0-2
- English and Spanish
- HTML and PDF
- Co-branded with AAP and AAFP

https://www.cdc.gov/vaccines/parents/FAQs.html
Instagram Q&A event for parents of young children

- **Date:** Monday, August 24 from 12:00-2:00pm EDT
- **Topic:** Staying up to date on vaccines during the COVID-19 pandemic
- **What:** CDC experts will provide real-time answers to questions
- **Where:** CDC’s Instagram feed: [instagram.com/cdçgov](https://instagram.com/cdçgov)
Adolescent immunization resources

www.cdc.gov/vaccines/partners/teens
HPV vaccine resources

- Clinical guidance
- Tips for boosting vaccination rates
- CE courses
- #PreteenVaxScene webinars
- Tips for talking with parents
- Fact sheets for parents

www.cdc.gov/hpv/hcp
Questions?

Dr. Sarah Schillie

Jessica MacNeil
Thank You!

Webinar archive will be available at:

www.phf.org/immunization

Questions or comments?

immunization@phf.org