Our Work has Expanded to All Ages

**Educate** the public about the importance of timely immunizations for people of all ages and the safety of vaccines.

Serve as a source of accurate immunization information to the **media**.

Keep providers and public health partners up-to-date on the latest immunization information, and **assist** advocates in their education and policy efforts.

**Advocate** for pro-immunization policies at the state and federal level.
ECBT’s Vaccinate Your Family Website
Every Child By Two’s Social Media

- **Vaccinate Your Family Facebook**
  - Over 200,000 followers

- **Shot of Prevention Blog**
  - Over 69,000 unique monthly visitors

- **Approximately 11 million reached through online platforms**
In Order to Maximize Our Impact, We are Making Big Organizational Changes...

VACCINATE YOUR FAMILY

The Next Generation of Every Child By Two
Building a Password-Protected Portal

The portal will compile partner resources on key issues; contact lists; toolkits on building networks and coalitions; and lessons learned to help build more effective strategies for communicating the value of vaccines.

We are building a two-way communication mechanism to ensure advocates can ask questions and begin discussions with colleagues when faced with specific challenges.

Communicate Regularly

We will continue our monthly policy calls and will invite a broader group of individuals.

If the portal and this call does not provide enough opportunity to coordinate, we will consider an additional call quarterly or bimonthly.
Our Discussion

• Short History of Vaccine Hesitancy/The Modern “Anti-Vaccine” Movement

• Know Your Audience: Who Am I Talking To?

• Communicating with the Public About Childhood, Teen and Adult Vaccines
Short History of Vaccine Hesitancy/The Modern “Anti-Vaccine” Movement

Original study (of 12 children) claiming vaccine-autism link was conducted by British researcher Andrew Wakefield. Published in The Lancet in 1998.

Dr. Robert Sears, a pediatrician, promotes his “alternative” vaccine schedule for parents.

Dozens of studies found no link between the MMR vaccine (or any other vaccine) and autism. www.vaccinateyourfamily.org/news/research

In 2010, the General Medical Council in U.K. determined Wakefield faked his data; performed unnecessary medical procedures on the children in his study; and was paid by lawyers who wanted to file lawsuits against vaccine manufacturers. Andrew Wakefield was stripped of his medical license due to “ethical lapses” and “unprofessional conduct”. In 2010, The Lancet retracted Wakefield’s research paper.

In January 2011, the British Medical Journal published in-depth investigation of Wakefield and his research, and called Wakefield’s 1998 study an “elaborate fraud.”
Communicating About Vaccines
Know Your Audience: Who Am I Talking to?

- Pregnant Women
- Parents (or Other Caregivers) of Infants, Young Children and/or Teens
- Preteens/Teens
- Young Adults
- Adults
Hesitancy is a Spectrum

*Best to spend time and efforts on those who are advocates, pro-vaccines and vaccine-hesitant.*
Communicating with People of All Ages: Tailor Your Messages Based on Cognitive Style

**Denialist**
- Disbelieves accepted scientific facts, despite overwhelming evidence. Prone to believe conspiracy theories. "I don’t care what the data show; I don’t believe the vaccine is safe."
- Provide consistent messaging repeatedly over time from trustworthy sources; provide educational materials; solicit questions; avoid “hard sell” approach; use motivational interviewing approaches

**Innumerate**
- Cannot understand or has difficulty manipulating numbers, probabilities, or risks. "A 1-in-a-million risk sounds high; for sure I'll be the 1 in a million who has a side effect; I'll avoid the vaccine."
- Provide nonmathematical information, analogies, or comparators using a more holistic “right brain” or emotive approach

**Fear-Based**
- Decision-making based on fears. "I heard that vaccines are harmful so I’m not going to get them."
- Understand source of fear; provide consistent positive approach; show risks in comparison with other daily risks; demonstrate risks of not receiving vaccines; use social norming approaches

**Heuristic**
- Often appeals to availability heuristic (what I can recall equates with how commonly it occurs). "I remember Guillain-Barré syndrome happened in 1977 after flu vaccines; that must be common, and therefore I’m not getting a flu vaccine."
- Point out inconsistencies and fallacy of heuristic thinking; provide educational materials; appeal to other heuristics

**Bandwagoning**
- Primarily influenced by what others are doing or saying. "If others are refusing the vaccine, there must be something to it; I’m going to skip getting the vaccine."
- Understand primary influencers; point out logical inconsistencies; use social norming and self-efficacy approaches

**Analytical**
- Left brain thinking; facts are paramount/ "I want to see the data so I can make a decision."
- Provide data requested; review analytically with patient

Most Parents Are Vaccinating Their Children

Most children ARE vaccinated

- The number of children who *do not receive vaccinations at all* is less than .08 percent.

Most parents want their communities to be fully vaccinated

- 59% of parents strongly agree and 22% agree that children in daycare should be vaccinated.
- Most parents (66%) think they should be informed of the number of children not up-to-date on vaccines.
- In a scenario where 1 in 4 children in daycare were not up-to-date, 74% would consider removing their own children.

Sources: 2016 National Immunization Survey and 2015 C.S. Mott Children’s Hospital’s National Poll on Children’s Health
When is the Best Time To Talk to Parents About Childhood Vaccines?

BEFORE they become parents
She Blinded Me With Science (Thomas Dolby)
Goal: Examine mothers’ knowledge, attitudes, beliefs, behaviors, and information needs throughout the vaccination process, from pregnancy to early parenthood.

Method: Between 2014 and 2016, a series of 7 online surveys sent to 200 pregnant women/first-time moms beginning in their 2nd trimester of pregnancy through child’s 19th month.

- 169 participants completed all 7 surveys (84.5% completion rate)
- Excluded women under age 18, women pregnant with more than one baby and women who reported that they would not accept any vaccines for their child

Source: Allison Fisher, MPH, CDC – Presentation at CDC Reverse Site Visit on June 20, 2017
Most mothers (90%) had decided on vaccine plans by the baseline survey (at the 2\textsuperscript{nd} trimester), and there was little variation between planned and actual behavior over the course of the surveys.

<table>
<thead>
<tr>
<th></th>
<th>2\textsuperscript{nd} Trimester</th>
<th>3\textsuperscript{rd} Trimester</th>
<th>Post-2 month Visit</th>
<th>Post-4 month Visit</th>
<th>Post-6 month Visit</th>
<th>Post-12 month Visit</th>
<th>Post-15-18 month Visit</th>
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<td>68.3</td>
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<td>79.5</td>
<td>82.2</td>
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<td>Receive all but space out or delay</td>
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<td>16.1</td>
<td>15.2</td>
<td>13.6</td>
<td>10.9</td>
<td>13.4</td>
<td>13</td>
</tr>
<tr>
<td>Receive some but not all</td>
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<td>4.3</td>
<td>5.6</td>
<td>6.3</td>
<td>6.3</td>
<td>7.6</td>
<td>4.1</td>
</tr>
<tr>
<td>Receive none</td>
<td>0.6</td>
<td></td>
<td>0.6</td>
<td>0.6</td>
<td>1.2</td>
<td>0.6</td>
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<td>Not yet decided</td>
<td>10.5</td>
<td>11.3</td>
<td>1.1</td>
<td>0.6</td>
<td></td>
<td>0.6</td>
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</table>
Maternal decisions on vaccine acceptance were almost always made before a child was born and remained relatively stable over time.

Interest in vaccines as a topic was highest before the baby was born. (48% reporting that they were “very interested” at baseline survey (2nd trimester); however, over 1/3 of survey respondents were still “very interested” after their child’s 15-18 month visit.)

Participants reported little discussion with their prenatal HCP about their baby’s vaccines. Participants most commonly spoke with their child’s doctor at the 2-month well visit about questions and concerns.

Confidence in the safety, effectiveness, and value of vaccines was stable during pregnancy and increased over time as children attended well-baby visits.

There is room for improvement in mothers’ perceived satisfaction with vaccine discussions during office visits. (Even after several vaccine visits, only 22% of mothers reported being “very satisfied” with their current level of knowledge regarding childhood vaccines. This did go up steadily with time and experience – only 6% at baseline).

Source: Allison Fisher, MPH, CDC – Presentation at CDC Reverse Site Visit on June 20, 2017
Communicating with Pregnant Women Online About Childhood Vaccines (Study published in *Pediatrics*, Nov. 2017)

**Goal:** Determine if web-based, social media intervention increases early childhood immunization.

**Method:** 3-arm, randomized controlled trial of 1,093 pregnant women at Kaiser Permanente Colorado between Sept. 2013 and Oct. 2015

- Website with vaccine information and interactive social media components (n=542)
- Website with vaccine information (n=371)
- Usual care only (n=180)

**Results:** Pregnant women who received the website with vaccine information and interactive social media were more likely to vaccinate their infants on time than participants receiving usual care only.

**Study authors state that these results suggest that interactive, informational interventions administered during pregnancy can positively influence parental vaccine behaviors.**

Parents may be deciding about vaccines for their children even earlier...

- Survey of 170 postpartum mothers and fathers (children born in 2015)
- 72% (120) reported deciding on vaccine preferences for their newborn before conception
- 66% (49) of first-time parents reported setting preferences before conception, compared to 77% (71) of parents who have had previous children.
- **Highlights the importance of educating parents-to-be and pregnant women about childhood vaccines.**
Internet survey of 2,510 parents of kids under 7 years of age

- Most parents surveyed reported accepting vaccines for their children as recommended (86.1%)
- Did not receive all vaccines as recommended, but currently on a catch-up schedule (2.3%)
- Chose to delay at least one but not all recommended vaccines (5.8%)
- Chose to delay all recommended vaccines (0.6%)
- Chose to refuse at least one but not all recommended vaccines (2.3%)
- Chose to refuse and delay some but not all recommended vaccines (1.4%)
- Chose to refuse all vaccines (1.6%)

Source: Allison Fisher, MPH, CDC – Presentation at CDC Reverse Site Visit on June 20, 2017
Baby’s doctor/HCP was the most trusted source of vaccine information among parents, regardless of vaccine behavior.

Other trusted sources of information across all groups included family members and scientific or medical journals.

24% of parents reported “Internet” as one of their top 3 sources of vaccine information.

• Most of these parents, regardless of acceptance category, used a search engine when they looked for vaccine information online.

Source: Allison Fisher, MPH, CDC – Presentation at CDC Reverse Site Visit on June 20, 2017
Parental Questions and Concerns

- The most common questions and concerns overall focused on short and long-term side effects, vaccine ingredients, the number of vaccines and their impact on the immune system, the safety of combination vaccines, and general vaccine safety.

- 20% of parents surveyed were concerned about specific ingredients (thimerosal, aluminum, or mercury), and 17% still had questions or concerns about vaccines and autism.

- Hesitant acceptors tended to have concerns across the board, most similar to those held by parents who were delaying or refusing vaccines.

Source: Allison Fisher, MPH, CDC – Presentation at CDC Reverse Site Visit on June 20, 2017
What Healthcare Providers Are Hearing from Parents

AAP Survey of Pediatricians (2006 and 2013)

- Pediatricians reported increased vaccine refusal between 2006 and 2013.
- They perceive that vaccine-refusing parents increasingly believe that immunizations are unnecessary.
- Other reasons for not vaccinating were less frequent in 2013 (cost, baby is too small, too many shots, autism/thimerosal concerns, concerns about vaccine safety/side effects)

Medscape Vaccine Acceptance Report (2016)

- 1 out of 3 clinicians have not perceived any recent changes in the overall willingness of parents to accept vaccines for their children.
- Among the clinicians who report seeing an increase in vaccine refusals blame persistent beliefs about a link between vaccines and autism, and concerns about other ingredients in vaccines.
- The reasons for vaccine refusal include the fear that children will experience adverse effects from the vaccine that are worse than the diseases they are intended to prevent or that "natural immunity" from acquiring one of these diseases is to be preferred.
- More than one half of all clinicians (and 83% of pediatricians) in the study believe that increasing vaccine refusal is based on a fear of overwhelming the child's immune system with too many vaccines.
- Vaccine hesitancy exists among healthcare providers, too, and some share the same concerns about vaccines as vaccine-hesitant parents. A lack of confidence in vaccines can be unconsciously communicated to parents, influencing their vaccine decisions.

AAP Guidance for the Clinician (Published in Pediatrics, Sept. 2016)

- A strong provider commitment to vaccination can influence hesitant or resistant parents.
- The majority of parents accepted the provider’s vaccine recommendations when they were presented as required immunizations to maintain optimal disease prevention.
- Vaccine-hesitant individuals are a heterogeneous group and their individual concerns should be respected and addressed. Vaccines are safe and effective, and serious disease can occur if your child and family are not immunized.
- Unvaccinated children put vaccinated children and medically exempt children who live in that same area at risk. (AAP)
- Personalizing vaccine acceptance is often an effective approach.
- Highlight the extensive testing of vaccines before and after licensure.
- The current vaccine schedule is the only one recommended by the CDC and the AAP. Alternative schedules have not been studied.

Medscape Vaccine Acceptance Report (2016)

- Asking parents about their specific concerns, and addressing those concerns with the evidence, was the approach that respondents cited most often as a potentially successful strategy.
- More than one half of the respondents attempt to increase parental confidence in vaccines by sharing that their own children are vaccinated on the recommended schedule.
- Alarmingly, one fourth of respondents find that offering or agreeing to administer vaccines on an alternative schedule satisfies hesitant parents.

Talking to Parents about Childhood Vaccines: Guidance for Healthcare Providers/Suggested Strategies From Other Providers

Rather than confronting parents about deeply held beliefs, doctors would do better to emphasize their shared concern for the child. “The first thing is to realize that parents believe they’re acting in the best interest of their child,” said Dr. Gary L. Freed, a pediatrician.

CDC’s Cognitive Interviews with Vaccine-Hesitant Parents

Materials explored included CDC’s print advertisements, fact sheet and infographic

- Participants felt that the materials were informative and easy to understand
- Participants liked that images were inclusive and diverse
- Materials increased intention for on-time vaccination for some, but not all, participants
- **Suggestions for improvement included:**
  - Fully address questions and concerns related to:
    - Vaccine side effects
    - Risks and repercussions of not vaccinating
    - Combination of vaccines in single shot or multiple shots in one visit
    - Vaccine schedule
  - Simplify materials (e.g., shorten and focus on one idea at a time)
  - Include more graphics and statistics

Source: Allison Fisher, MPH, CDC – Presentation at CDC Reverse Site Visit on June 20, 2017
NVPO’s 2016 Focus Groups with Vaccine-Hesitant Parents

For These Women
- Confidence entailed trust, knowledge and control
- Vaccine ingredients, the schedule and mainstream medical system fostered concerns

For Vaccine Communicators
- Many sources shape views and beliefs
- No single message or approach worked well with all
- Balanced messages were desired
- Short videos may have promise and potential

Elements for Effectively Communicating
- Clear messages
- Respectful tone
- Use of statistics and details
- Information on both pros and cons
- Credible source
- References to additional information

Source: Judy Mendel, MPH, Health Communication Specialist, National Vaccine Program Office – Presentation to NVAC on June 6, 2017
Communicating with Parents about Teen Vaccines

Highlights from C.S. Mott Children’s National Poll on Children’s Health, 2017

Among parents of teens age 13-17:

- Most parents (over 90% of poll respondents) think their teen has received all recommended vaccines, despite national data suggesting otherwise.
- Over one-third of parents do not know when or if their teen is due for another vaccine.
- Parents expect child health providers to guide them on teen vaccines, by scheduling appointments or sending reminders.

Source: C.S. Mott Children’s National Poll on Children’s Health, 2017
Parental Barriers to HPV Vaccination

• Lack of urgency; fear of condoning promiscuity or early sex; cost and concerns about safety and “newness”.

The most important factor in parents agreeing to get their child vaccinated with HPV vaccine is a strong provider recommendation.

• “What you say matters; how you say it matters even more.”

• A strong recommendation should be presented using a presumptive approach. The presumptive approach calls for providers to “announce” that it is time for the HPV shot, as opposed to “asking” if the patient wants to get the vaccine.

• Providers may unknowingly undercut their recommendations through qualifications and offering option to delay.

• Persistence works: Providers who engaged hesitant parents in a discussion that addressed concerns had more same day HPV vaccination.

Sources: HPV Vaccination Resource Book for Area Health Education Centers and Other Organizations (Updated January 2017); Gilkey, M.B. et al. Quality of Physician Communication about HPV Vaccine: Findings From a National Survey. Cancer Epidemiology, Biomarkers and Prevention 2015 and Jasmin Tiro - Presentation on Audio Recording Study on NVPO Vaccine Confidence Partners Call on November 1, 2017
Communicating with Adults about Vaccines

Key Findings from CDC’s Research

- Adults believe VPDs can be serious and vaccines are important, especially for certain groups.
- Awareness and knowledge of vaccines recommended for adults besides influenza is low.
- HCP recommendation is #1 reported factor in influencing vaccination decisions, but adults perceive receiving few vaccine recommendations.
- Adults are motivated to get vaccines to protect their own health and many would get a vaccine in order to protect loved ones as well.
- Adults do have some concerns about the safety and side effects of vaccines as well as questions about vaccine effectiveness and cost.

CDC’s Recommendations for Communication with Adults

- Stress the relevance and importance of timely vaccination for protection.
- Highlight susceptibility: All adults are at risk for VPDs.
- Explain severity and potential costs of getting VPDs.
- Use empowering messages and highlight the benefits of vaccination.
- Getting vaccinated is part of staying healthy.
- Provide transparent and plain language information on VPDs and vaccines, including safety and efficacy as well as how to get vaccinated.
- Tailor information as much as possible. Encourage them to talk with HCPs about vaccines that are right for them.

Communicating with Adults Online

Reaching Adults Online (CDC Research)

- Tailored messages and information are most engaging
- Targeted advertising on Facebook resulted in high, sustained audience engagement
- Adults are increasingly using mobile technologies
- Adults search for information about “vaccines”, especially related to travel
- Earned media can be very effective in engagement too

Source: Ramakrishnan, CDC, Adult Immunization Communication Program Update – Presentation at 2016 NAIIS - www.izsummitpartners.org/content/uploads/2016/05/10b-1-Ramakrishnan-Adult-Immunization-Communication-Prg-Update.pdf
A strong and clear recommendation from a healthcare provider is a critical factor in determining whether adult patients decide to get vaccinated.

For those patients who need more, try the SHARE strategy.

- **SHARE** the tailored reasons why the recommended vaccine is right for the patient given his or her age, health status, lifestyle, occupation, or other risk factors
- **HIGHLIGHT** positive experiences with vaccines (personal or in your practice), as appropriate, to reinforce the benefits and strengthen confidence in vaccination.
- **ADDRESS** patient questions and any concerns about the vaccine, including side effects, safety, and vaccine effectiveness in plain and understandable language.
- **REMIND** patients that vaccines protect them and their loved ones from many common and serious diseases.
- **EXPLAIN** the potential costs of getting the disease including serious health effects, time lost (such as missing work or family obligations), and financial costs.

**NVAC Standards for Adult Immunization Practice** — Series of fact sheets for healthcare professionals with information and tips on how to improve vaccination practice (assessment, recommendation, administration, referral, and documentation).

Recommended Childhood/Teen/Maternal Vaccination Resources

Provider Resources for Vaccine Conversations with Parents (CDC, AAP and AAFP)
- www.cdc.gov/vaccines/conversations

Maternal Vaccination Print Resources
- www.cdc.gov/vaccines/pregnancy (CDC)
- www.immunizationforwomen.org (ACOG)
- www.vaccinateyourfamily.org/files/resources/FINAL_updatedpregnancyflier_03162016.pdf (ECBT)

Vaccinate Your Family website (ECBT)
- www.vaccinateyourfamily.org

Immunization Resources for Parents and Parents-to-Be – ECBT developed these booklets to help answer questions that parents/families and WIC participants may have about vaccines. It brings together resources from the CDC, ECBT, and other credible partners, and address the importance of immunizations for children, pregnant women and adults.
- www.ecbt.org/images/articles/Final2017ImmunizationResourcesforParents_English-508compliant.pdf (English)
- www.ecbt.org/images/articles/Final2017ImmunizationResourcesforParents_Spanish-508compliant.pdf (Spanish)

Recommended Immunization Schedules for Children and Teens (Easy-to-Read Formats)
- www.cdc.gov/vaccines/schedules/hcp/child-adolescent.html
Recommended Resources to Promote HPV Vaccination

*HPV Vaccination Resource Clearinghouse* (HPV Roundtable Provider Training Task Group) - Find effective resources for providers, partners and patients to support implementation of strategies to increase HPV vaccination.

- [www.mysocietysource.org/sites/HPV/ResourcesandEducation/SitePages/Home.aspx](http://www.mysocietysource.org/sites/HPV/ResourcesandEducation/SitePages/Home.aspx)

*You Are the Key to HPV Cancer Prevention – Train the Trainer* (CDC)


*HPV Vaccination Resource Book For Area Health Education Centers and Other Organizations* - Updated January 2017 (AHEC, GW University, GW Cancer Center)

Recommended Resources for Adult Vaccinations

**NVAC’s Standards for Adult Immunization Practices** - The CDC website has a series of fact sheets for healthcare professionals with information and tips on how to improve vaccination practice including assessment, recommendation, administration, referral, and documentation.


**Variety of Educational Resources** - Use these free educational resources from the CDC to help your adult patients make informed decisions about vaccinations

- [www.cdc.gov/vaccines/hcp/adults/for-patients/index.html](http://www.cdc.gov/vaccines/hcp/adults/for-patients/index.html)

**Vaccine Information Statements (VIS)** - Provide Vaccine Information Statements to your patients to help them make informed decisions about vaccinations. Available in multiple languages from IAC.

- [www.cdc.gov/vaccines/hcp/vis/current-vis.html](http://www.cdc.gov/vaccines/hcp/vis/current-vis.html)
- [www.immunize.org/new/vis.asp](http://www.immunize.org/new/vis.asp)

**Recommended Adult Immunization Schedule** (Easy-to-Read Format)

- [www.cdc.gov/vaccines/schedules/downloads/adult/adult-schedule-easy-read.pdf](http://www.cdc.gov/vaccines/schedules/downloads/adult/adult-schedule-easy-read.pdf) (English)

**Vaccinate Your Family website (ECBT)**

- [www.vaccinateyourfamily.org](http://www.vaccinateyourfamily.org)
Help Us Keep You Informed

• **ECBT Daily News Clips/Monthly Top 5/Week in Review** - Email ECBT to sign up at info@ecbt.org

• ECBT’s Shot of Prevention Blog - Become a subscriber to to receive an email when weekly blog is posted - [www.shotofprevention.com](http://www.shotofprevention.com)

• Like Us on Facebook: [www.facebook.com/VaccinateYourFamily](http://www.facebook.com/VaccinateYourFamily)

• Follow us on Twitter: EveryChildBy2 & ShotofPrev

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