**PowerPoint Presentation: Immunizations Across the Lifespan and Addressing Vaccine Hesitancy**

**Part II: Addressing Vaccine Hesitancy**

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**Notes**

**Slide 16- Part II: Addressing Vaccine Hesitancy**

We are now going to talk about vaccine hesitancy and how you can communicate with the people around you who have concerns about vaccines.

**Slide 17- Outline**

**Slide 18- What is Vaccine Hesitancy?**

What is vaccine hesitancy?

An expression of concern or doubt about the value or safety of vaccination. People who are vaccine hesitant will delay/question vaccines. People’s vaccination behavior ranges from total vaccine acceptance to total vaccine refusal. Vaccine hesitancy exists on this continuum. We should be concerned about vaccine hesitancy because when fewer children are immunized, more people are at risk of getting dangerous infectious diseases.

Definition from World Health Organization (WHO)- Vaccine hesitancy refers to delay in acceptance or refusal of vaccines despite availability of vaccination services. Vaccine hesitancy is complex and context specific varying across time, place and vaccines. It includes factors such as complacency (do not perceive a need for the vaccine), convenience (access), and confidence (do not trust vaccine or provider).

Source: <http://www.who.int/immunization/programmes_systems/vaccine_hesitancy/en/>

**Slide 19- Three Ways to Express Vaccine Hesitancy**

**Slide 20- When Did Vaccine Hesitancy Begin in the U.S.?**

In the Era of Discovery, scientists were beginning to understand inoculation and vaccination and how these methods could prevent different diseases. The concept of antibodies and cellular immunity was developed. Scientists were growing different viruses in eggs and cell culture trying to learn as much as they could about these viruses. Vaccine Accomplishments: smallpox, rabies, cholera, typhoid, diphtheria, pertussis, tetanus, tuberculosis, yellow fever, and influenza

* Inoculation- A live organism is introduced in a controlled way to minimize the risk of infection. It is more risky than vaccination because the person is being infected with a disease pathogen. Inoculation was the first method used to develop immunity against various infectious diseases.
* Vaccination- Administering a dead or weakened disease pathogen to help the body develop immunity against that disease. You cannot get a disease through vaccination.

The Golden Age is characterized by science-mindedness. Jonas Salk developed the first effective vaccine against polio. It was a very exciting time in history! More vaccines against devastating diseases were developed as a result of technological and programmatic advances such as those listed below. Many diseases were nearly wiped out in the U.S. and millions of children were saved from these devastating diseases because of vaccines. Vaccine Accomplishments: polio, measles, mumps, rubella, *N meningitidis*, *S pneumoniae*, hepatitis B, *H influenzae*, Hepatitis A, varicella, rotavirus, cervical cancer, and herpes zoster

***Technological advances***

Capsular polysaccharides

Protein-polysaccharide conjugation

Cold adaptation

Reassortment

Purified protein antigens

Recombinant-expressed protein antigens

Virus-like particles

Engineered attenuation

Reverse vaccinology

Adjuvants

Delivery methods

Manufacturing

Quality control

Source: *Plotkin. Nature Med 2005;11:S5*

***Programmatic advances***

Disease surveillance

Economic analysis

Safety monitoring

Refinement in clinical trials

Effectiveness studies

Correlates of protection

Recommendations

Source: *Marshall. The Vaccine Handbook, 6th Edition. PCI Books, Inc.; 2017*

We are currently in the Era of Second Thought, which began with a published study in 1998 from Andrew Wakefield and 10 other authors that linked the measles, mumps, and rubella (MMR) vaccine to autism (*Lancet 1998;351:637-641)*. With the exception of Wakefield, all the other authors issued a retraction in 2004, but full retraction had to wait nearly six more years. The study was finally retracted in 2010, Wakefield lost his medical license, and studies in thousands of children have shown the vaccine is safe.

Vaccines do NOT cause autism. Despite extensive research, no reliable study has shown a link between autism spectrum disorder and the measles, mumps, and rubella (MMR) vaccine. Despite the fact that vaccines have proven to be safe and effective over and over again, anti-vaccine advocates still try to discredit vaccines and ultimately threaten public health. We are living in an era focused on individual choice characterized by a culture of anti-science. Disease outbreaks are now making a comeback in the U.S. because we have pockets of unvaccinated children, which make anyone who’s not vaccinated vulnerable to diseases.

**Slide 21- How Pervasive is Vaccine Hesitancy in the U.S.?**

National Data Sources:

*1https://www.cdc.gov/vaccines/imz-managers/coverage/childvaxview/data-reports/7-series/reports/2016.html*

*2*[*https://www.cdc.gov/vaccines/imz-managers/coverage/schoolvaxview/data-reports/coverage-reports/2016-17.html*](https://www.cdc.gov/vaccines/imz-managers/coverage/schoolvaxview/data-reports/coverage-reports/2016-17.html)

Healthy People 2020 Goal for fully vaccinated 19-35 month olds is 80%. The U.S. has a ways to go to close the gap. Healthy People 2020 Goals for kindergarten vaccine requirements is 95%. Specific vaccine requirements vary between states. The U.S. has almost achieved this goal! This benchmark of 95% is the minimum requirement to prevent disease epidemics.

Source: <https://www.healthypeople.gov/2020/topics-objectives/topic/immunization-and-infectious-diseases/objectives>

**Slide 22- How Pervasive is Vaccine Hesitancy in WA?**

Washington Data Sources:

*1https://www.cdc.gov/vaccines/imz-managers/coverage/childvaxview/data-reports/7-series/reports/2016.html*

*2*[*https://www.cdc.gov/vaccines/imz-managers/coverage/schoolvaxview/data-reports/coverage-reports/2016-17.html*](https://www.cdc.gov/vaccines/imz-managers/coverage/schoolvaxview/data-reports/coverage-reports/2016-17.html)

Healthy People 2020 Goal for fully vaccinated 19-35 month olds is 80%. WA is lower than the national target. Healthy People 2020 Goals for kindergarten vaccine requirements is 95%. Specific vaccine requirements vary between states. WA is lower than the national target. This benchmark of 95% is the minimum requirement to prevent disease epidemics.

Source: <https://www.healthypeople.gov/2020/topics-objectives/topic/immunization-and-infectious-diseases/objectives>

**Slide 23- K – 12 Students with Non-Medical Exemptions in SY 2016-17**

There is reason for us to be concerned about vaccination rates because we have not reached the 95% for threshold needed for community (herd) immunity. In fact, vaccination exemption rates in our state have increased in recent years.

This map shows K-12 vaccination exemption rates for non-medical reasons in Washington counties, for the 2016-2017 school year. The state average is 4.3% for non-medical exemptions. Note geographical clustering. The darker the color, the higher the vaccine exemption rates are for that particular county.

In Washington, we have one of the highest vaccine exemption rates for school-age children (K-12) in the country at 5.3% (any kind of exemption in 2016-2017). At some schools, it is 10% or higher. This means that some schools in our state are below the community immunity threshold for some diseases. When our community immunity is weakened, disease outbreaks can occur, leaving all of us at risk.

* + The median exemption rate nationally was 2%.
  + Only Alaska had more exemptions than we did.

You can find all the 2016-17 data for K12 on our website at: <https://www.doh.wa.gov/Portals/1/Documents/Pubs/348-315-AllGrades-K-12-SY2016-2017.xlsx>

You can find up to date or view year after year Washington School Immunization Reports on our website at: <https://www.doh.wa.gov/DataandStatisticalReports/HealthBehaviors/Immunization/SchoolReports>

**Slide 24- Four Major Reasons Parents Don’t Vaccinate:**

Complacence

* Do not perceive a need for the vaccine
* Do not value the vaccine

Barriers

* Restricted work schedules (need weekend clinic times; become familiar with vaccine schedule to plan for time off)
* Health insurance
* Physicians and clinics (not located nearby, long wait times)

Fear

* Vaccine safety
* Side effects

Uninformed (not understanding the facts)

* Not familiar with the vaccine schedule
* Don’t understand the benefits of vaccines
* Confused by mixed messages around vaccine safety and efficacy

**Slide 25- Reasons Why People Don’t Vaccinate:**

Most of the reasons listed here focus on fear and uniformed (not understanding the facts). The Immunity Community’s Frequently Asked Questions (FAQs) addresses most of these beliefs. Check it out here: <https://immunitycommunitywa.org/faqs/>

**Slide 26- Reasons Why People Don’t Vaccinate cont.**

This is not an exhaustive list. Do you know of any other reasons that are not on this list? The Immunity Community’s Frequently Asked Questions (FAQs) addresses most of these beliefs. Check it out here: <https://immunitycommunitywa.org/faqs/>

**Slide 27- Influencing Factors on Vaccine Hesitancy:**

Many factors influence why people don’t vaccinate.

Negative Healthcare Experiences:

* If people haven’t had a good encounter with a healthcare professional, that can influence whether or not they trust people in the medical field and return for care.

Conspiracy Theories: List of examples below

* Certain airline companies vaccinate people through the air conditioning system (no this isn’t possible).
* Vaccines cause autism (Andrew Wakefield produced fraudulent research to make this claim).
* Vaccines are made with aborted fetal tissue (no they are not).
* There are many others that abound on the internet, and especially social media.

Parental Lifestyles:

* Crunchy Mom: Practices natural living. She is an advocate of natural birth, non or selective circumcision, not vaccinating, baby wearing, breastfeeding, co-sleeping, cloth diapering, attachment parenting, homeschooling, organic and green living, etc.
* Scrunchy Mom: Wants their child to live in a more natural, organic environment, but can’t quite commit to all the activities and practices involved in being a crunchy mom. So they do some, but not all of it. They may choose not to vaccinate.
* Silky Mom: They try not to worry a whole lot and just live it up. Not too concerned about being green or living an organic lifestyle. Will bottle feed part or full-time, uses disposable diapers, pro-circumcision, pro-vaccination, takes all advice from medical professionals, don’t care too much about labels and usually buys products based on convenience.

Media

* Many anti-vax parents cluster together on Facebook groups and parenting message boards to reinforce their beliefs.
* For every anti-vax celebrity you read about, always remember that there are many more celebrities who not only are vaccine advocates, but who also do so much for kids all around the world.

**Slide 28- How to Address Vaccine Hesitancy:**

Have a respectful two-way dialogue with the parents while listening to and acknowledging their concerns. Correct misconceptions and clearly articulate the message that vaccines are safe and effective, and serious disease can occur if your child and family are not immunized.

**Slide 29- Strategies for Addressing Vaccine Hesitancy:**

The Immunity Community is a program of [WithinReach](http://www.withinreachwa.org/) that promotes vaccination and vaccine confidence across the lifespan in Washington State and beyond. They have created tools that you can use for promoting immunization in your community. They provide effective and proven approaches to address the problem of vaccine hesitancy.

The Immunity Community website, [www.immunitycommunitywa.org](http://www.immunitycommunitywa.org), is a tool that can help you share your opinion that vaccines are the best way to protect your family from disease. As you explore the website, you will learn:

* The reasons why we vaccinate
* What the current vaccine schedules are
* The most frequently asked questions from parents about vaccines
* The different levels of engagement and what level works for you
* How to use the HEART Method when talking about vaccines
* Review the conversation guide for healthcare professionals and take from it what you find to be useful

**Slide 30- What if I don’t know much about vaccines?**

**Slide 31- Immunity Community Resources**

**Slide 32- E-Learning Course**

**Slide 33- Other Immunization Resources**