# VACCINE HESITANCY AND HPV VACCINE

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#### Disclosure

- I have no relevant financial relationships with the manufacturers of any commercial products and/or provider of commercial services discussed in this CME activity
- I do not intend to discuss an unapproved/investigative use of a commercial product/device in my presentation.

#### **OBJECTIVES**

- Understand the importance of vaccines
- Understand the underlying causes of parents refusing HPV vaccine
- Become knowledgeable of the best approaches to discuss HPV immunization concerns with parents

### IMPACT OF VACCINES

- One of 10 most important Public Health initiatives in history
- 3 million deaths/year in children prevented
- Saves money by preventing medical complications, loss of income

#### IMPACT OF VACCINES

- Routine Childhood Immunizations 2009 cohort
- Prevents
  - 42,000 early deaths
  - 20 million cases of disease
- Saves
  - \$13.5 billion direct costs
  - \$68.8 billion societal costs

# IMPACT OF VACCINES

DISEASE	20 <sup>TH</sup> CENTURY ANNUAL MORBIDITY	2010 REPORTED CASES	% DECREASE
DIPTHERIA	21,053	0	100
PERTUSSIS	200,752	21,291	89
TETANUS	580	8	99
POLIO	16,316	0	100
MEASLES	530,217	61	>99
MUMPS	162,344	2,528	98
RUBELLA	47,745	6	>99
CRS	152	0	100
HFLU	20,000 (EST)	270	99
SMALL POX	29,005	0	100

# VACCINE REFUSAL





#### HESITANCY vs. REFUSAL

- Acceptance group
  - **-** 70%
  - Interested in vaccine information
  - High trust level
- Hesitant group
  - -30%
  - Interested in vaccine information
  - Want to trust
- Anti-vaccine group
  - **–** 1%
  - NO Interest in vaccine information
  - NO trust

**SOURCE: OPEL 2012** 

### **DEMOGRAPHICS**

- White
- Female
- 30 years of age or older
- More than 1 child
- Higher income
- More educated



#### PARENTAL CONCERNS

Too Many36%

• Autism 30%

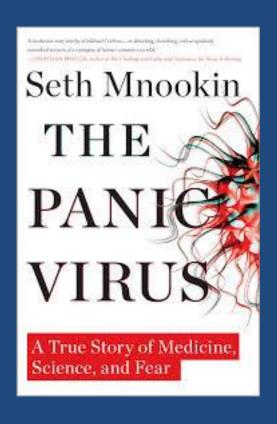
• Fevers 30%

Unsafe ingredients 25%

Not tested enough 15%

Causes the disease 15%

### COMMON DENOMINATOR





#### **FEAR**

- Consumerism
- Vaccine success
- Lack trust in "Big Pharma"
- Lack of trust in public health/ government
- Lack of trust in science
- Alternative medicine
- Media
- Misinformation

# ADOLESCENT IMMUNIZATIONS

Vaccine	Kansas	US average
Tdap	92.2%	84.6%
Meningococcal	55.9%	77.8%
HPV#1 (F)	39.9%	57.3
HPV#2 (F)	29.9%	47.7%
HPV#3 (F)	21.0%	37.6%
HPV#1 (M)	25.1%	34.6%
HPV#2 (M)	19.3%	23.5%
HPV#3 (M)	NA	13.9%

MMWR, 2014 76

#### ADOLESCENT VACCINE REFUSAL

- National Immunization Survey 2008-2010
- Reasons parental refusal Tdap and Menactra
  - Not recommended
  - Not necessary
  - Lack of knowledge
  - Don't know

#### HPV HESITANCY

- Reasons parental refusal
  - Vaccine not needed
  - Lack of knowledge
  - Daughter not sexually active
  - Safety of vaccine

MMWR, 2013

78

# PROVIDER RECOMMENDATION

	2008	2010
Tdap	46.9%	50.0%
Menactra	28.6%	35.8%
HPV	46.8%	52.4%

#### PERCEIVED PROVIDER BARRIERS

- Concerns about financing issues
- Concerns about parental attitudes
- Logistical difficulties
- Safety of HPV vaccine
- Uncertainty of the need

#### OTHER FACTORS

- Infrequent preventative care visits
- School entry requirements

#### WHAT CHANGES PARENTS MINDS?

- Health Care Provider
  - Most important Source
  - Must recommend
- More information
  - Handouts
  - Web site
  - IOM Report questions effectiveness of these
  - Knowledge not predictor of vaccinations (2014)

**SOURCE: OPEL 2012** 

#### MESSAGING

#### Message

- Evidence from CDC on MMR and Autism
- Text information from VIS
- Images of children with diseases
- Dramatic narrative from fact sheet

#### Result

- Corrected misconception- no change in refusal
- No change
- Increase concerns about autism from vaccines

#### WHAT CHANGES PARENTS MINDS?

- Health Styles Survey 2009
  - 82% reported health care provider most trusted source of vaccine information
  - 79% reported vaccines were important
  - 79% vaccines were safe
- One additional factor not mentioned
  - Recent epidemics
  - News medias reporting of these

#### CHANGING PERCEPTIONS

- University of Michigan National Poll
  - 34% Parents think vaccines more of a benefit than1 year ago
  - 25% parents think vaccines safer than 1 year ago
  - 35% parents are more supportive of childcare/school vaccine requirements than 1 year ago
- California law revoking personal belief exemption

#### TALKING TIPS

- The parent wants what is best for the child
- Understand this is an emotional issue
- Make sure you know which "fear" the parent has
- Don't assume scientific evidence is understood or very effective
- Understand the importance of anecdotes

#### TALKING TIPS

- Listen
- Take time
- Welcome questions
- Don't interrupt
- Don't be offended
- Don't be judgmental
- Be honest
- Correct misconceptions/Provide information
- Speak without using medical jargon
- Respect parental authority

#### TALKING TIPS

- Participatory vs. Presumptive Initiative
- Participatory
  - Are we going to do shots?
- Presumptive Initiative
  - We will do 3 shots today is that ok?
- Aggressive pursuit
  - Toll on providers

#### HPV TALKING TIPS

- Have nurses begin the conversation (presumptive)
- Cancer Vaccine
- Gain vs. Loss messaging
- Waiting is Risky
- Most effective at 11-12 years age
- Bundle with other vaccines
  - Don't use terms required and recommended
- Schedule rechecks

#### **COMMON ANSWERS**

- HPV vaccine doesn't encourage sexual activity
- HPV related cancers occur in 1:160 children
- Safety monitored 3 different databases
- No deaths, No ovarian failure, no neurological problems
- May cause local redness, soreness, dizziness, syncope, nausea, headache

#### HOW DO WE IMPROVE RATES

- Providers
  - Educate
  - Eliminate Barriers
- Parents
  - Anti-cancer vaccine
  - Safety
  - De-emphasize sexual transmission
- System
  - Vaccine access in state