


## Responding to Families who Decline Routine Vaccinations for Their Children

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I have no relevant financial relationships to disclose  
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## Objectives

- Describe current data and controversies concerning families who decline vaccinations
- Discuss current professional guidelines for responding to these situations
- Identify ethical principles and virtues that help guide and justify a response and/or policy
- Compare the refusal of vaccines to other clinical contexts in which patients decline recommended treatments



## Case

- A family presents to the clinic after recently moving to Iowa from Colorado
- They have a 5 year old and a 5 month old, both healthy, neither of whom have received any vaccinations
- Parents want to know about exemptions in Iowa so that their children could attend public school
- They have refused vaccines because they worry about hidden dangers to their children's health and feel that "natural is better" but have attended well child checks
- They do not have religious beliefs



### More vaccine exemptions

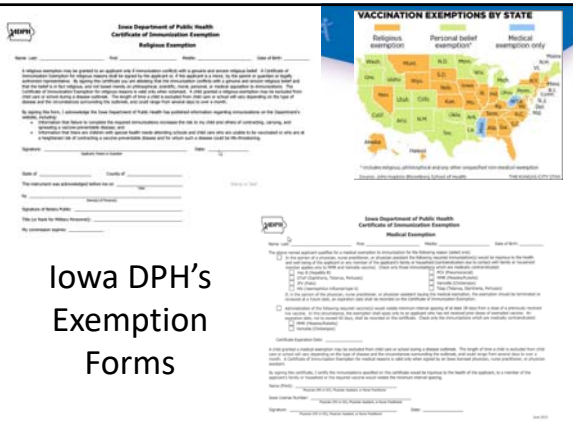
The number of Iowa children obtaining vaccination exemptions has more than quadrupled since 2000.



### VACCINATION EXEMPTIONS BY STATE



### How Hard is it to Get a Vaccine Exemption in Your State?

## Iowa DPH's Exemption Forms

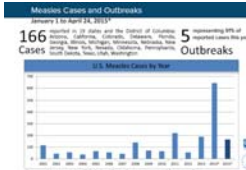
## Correlation between rates of vaccine exemption and measles cases

### Measles Cases and Outbreaks

166 Measles Cases reported in 23 states and the District of Columbia in 2015, representing 8% of reported cases this year.

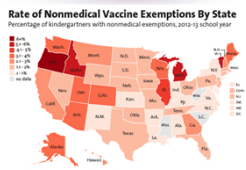
5 Measles Outbreaks reported in 2015

25% Measles Cases by Year




### Rate of Nonmedical Vaccine Exemptions By State

Percentage of kindergartners with nonmedical exemptions, 2012-13 school year



### 2015 Measles Cases in the U.S.

January 2, 2015 to January 2, 2016



CA has since eliminated their personal belief exemption (PBE) but it will not take effect for several years

### A brief history of vaccines, refusals, and mandates

1700 1800 1900 2000

1796 First smallpox vaccine

1850s Public health mandates smallpox vaccine prior to school entry

1870-80s Pasteur creates attenuated bacterial and viral vaccines

1905 Supreme Court Case upholds state's right to mandate vaccines

1940-1988 Most of the modern vaccines developed

1955 Official, endorsed vaccine schedule is updated annually

1988-2010 Number of recommended vaccines increases

1998 Wakefield article suggests MMR link with autism

### Tension between liberty and the common good

### Success of Vaccines

Disease	Pre-Vaccine Era Estimated Annual Morbidity*	Most Recent Reports† or Estimates of U.S. Cases	Percent Decrease
Diphtheria	21,653	0 <sup>†</sup>	100%
H. influenzae (invasive, <5 years of age)	20,000	243 <sup>†§</sup>	99%
Hepatitis A	117,333	11,049 <sup>†</sup>	91%
Hepatitis B (acute)	66,232	11,269 <sup>†</sup>	83%
Measles	538,217	61 <sup>†</sup>	>99%
Mumps	162,344	982 <sup>†</sup>	99%
Pertussis	200,752	13,506 <sup>†</sup>	93%
Pneumococcal disease (invasive, <5 years of age)	16,669	4,167 <sup>†</sup>	74%
Polio (paralytic)	16,316	0 <sup>†</sup>	100%
Rubella	47,745	4 <sup>†</sup>	>99%
Congenital Rubella Syndrome	152	1 <sup>†</sup>	99%
Smallpox	29,005	0 <sup>†</sup>	100%
Tetanus	580	14 <sup>†</sup>	98%
Varicella	4,985,120	449,363 <sup>†</sup>	89%

\*CDC JAMA, November 14, 2007; 298(18):2165-63  
†CDC MMWR, January 8, 2010; 58(1):2) 1458-68  
‡2008 estimates. § pneumoniae estimates from Active Bacterial Core Surveillance  
†§ type b and 218 unknown

### Vaccine refusal and hesitancy

- In a 2009 survey of 2,500 parents (62% response rate)
  - 90% of parents felt vaccines are a good way to protect children
  - 88% generally follow physician recommendations
  - 54% are concerned about serious adverse effects of vaccines
  - 31% felt parents should have the right to refuse vaccines required for school for any reason
  - 25% agreed with statement that some vaccines cause autism in healthy children
  - 11% felt their children do not need vaccines for disease that are no longer common
  - 11.5% had refused at least one recommended vaccine
    - 17.7% MMR, 32.3% varicella, 31.8% meningococcal, 56.4% HPV)

Freed et al. Pediatrics 2010; 125 (4)

### Vaccine refusal and hesitancy

- Surveys of primary care providers (pediatricians and family practice)
  - About 80% reported that 1% of parents refused one or more vaccines per month
  - About 20% reported that >5% of parents refused one or more vaccines
  - About 20% reported that >10% of parents requested to spread out vaccines, and over 90% reported that at least one request in a typical month
  - 64% of peds and 29% of FP often or always require parents to sign a form
  - 21% of peds and 4% of FP often or always dismiss families from practice if they refuse one or more vaccines in the primary series

O'Leary et al. Pediatrics 2015; 136 (6)  
Kempe et al. Am J Prev Med 2011; 40 (5)

### AAP template for refusal to vaccinate form

American Academy of Pediatrics

### Vaccine Concerns Reported by Parents of Children Age 6 or Younger, 2010

Concern	Percentage of Parents Reporting Concern (%)
Too many/once	~35
Too many/general	~32
Cause fevers	~28
Cause autism	~25
Ingredients unsafe	~22
Not tested enough	~18
Cause disease	~15
Low risk for disease	~12
Diseases not serious	~10

Kennedy et al. Health Affairs, 2011; 30 (6)

	1988	1991	1994	1997	2000	2010
DTP / DTaP	✓	✓	✓	✓	✓	✓
Polio	✓	✓	✓	✓	✓	✓
MMR	✓	✓	✓	✓	✓	✓
Hib		✓	✓	✓	✓	✓
Hepatitis B			✓	✓	✓	✓
Varicella				✓	✓	✓
Pneumococcal (PCV 7)					✓	✓
Meningococcal (MCV 4)					✓	✓
Influenza						✓
Hepatitis A						✓
Rotavirus						✓
Human Papilloma Virus (HPV)						✓

### Dr. Google says...

http://www.nvic.org/

### Websites to direct families to...

www.cdc.gov/vaccines

http://www.vaccineinformation.org/

http://www.vaccines.com/index.cfm

### Professional Guidelines to Help us Respond

### Responding to Parent Refusal of Immunization

*Pediatrics*, 2005

- Ask about reasons, listen respectfully
- Find common ground in goal of child's health
- Respond to concerns
- Provide information, education, stories, persuasion
- Document discussion, consider having parent sign a refusal waiver
- Continue to counsel rather than dismissing patients from practice
- The goal is not to win, but to win them over


### The American Medical Association (AMA) Code of Medical Ethics

Guidance on terminating a patient-physician relationship – if considering dismissing a family from a practice

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## Ethical Principles

- Best interest of child
  - Beneficence
  - Non-maleficence
- Longstanding tension between goals
  - Protecting individual liberties (autonomy) while maximizing the common good
- Justice
  - Equitable balance of sharing burden



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## Ethical Virtues

- Aristotle's Tools of Rhetoric
  - Ethos (Character) – the speaker must be trustworthy
  - Logos (Logic) – the message must be factual correct
  - Pathos (Emotion) – the message must resonate emotionally
  - Telos (Goal) – the speaker must have an end in mind
- Virtues
  - Patience
  - Compassion
  - Honesty
  - Courage
  - Practical wisdom
  - Fidelity




<http://plato.stanford.edu/entries/aristotle-rhetoric/>

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## Strategies for responding

- Accept
- Persuade
- Coerce
- Dismiss



President Obama gets a flu vaccination in an exam room in 2009  
<http://whitehousemuseum.org/floor0/doctors-office.htm>

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## Strategies for responding

- Just Accept parent's decision?
  - Do more! Remember, 88% of families follow their physician recommendation
- Be Persuasive! But Minimize Coercion
  - Parent less likely to resist vaccination if provider takes a presumptive rather than a permissive approach
  - If provider pursues recommendation, 47% of hesitant parents subsequently vaccinated
  - Enforce school vaccine requirements and make exemptions fair but as difficult to obtain as getting the recommended vaccines
  - Respond to unsubstantiated claims about vaccines publicly

Freed et al. Pediatrics 2010; 125 (4)

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## Dismissing or refusing to accept families who decline to accept vaccination

- Two basic approaches
  - Families looking for a physician are screened by office personnel for adherence to recommended vaccine schedule before an appointment will be made
  - Physician sees patient, but if after discussion, families persist in declining vaccines, they are asked to find another medical home
- Up to 25% of pediatricians and 4% of family medicine physicians would always, often, or sometimes dismiss families from their practice who refuse vaccines

O'Leary et al Pediatrics 2015

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## Ethical Arguments Against Dismissal

- Does not benefit the individual child
- No proven effect on the others in a practice
- Does not benefit the common good (public health)
- Puts unfair burden on other healthcare providers
- Undermines trust in physicians and organized medicine
- Communication with a trusted healthcare provider remains the best avenue for changing minds about vaccination
- If a substantial level of distrust develops about issues beyond immunization about philosophy of care, then it may be appropriate to encourage a change in medical home

**Tailored approaches**

- Approach to mandates and exemptions for vaccines could be different based on communicability and risk to society vs the individual
- Families of under or non-immunized children could be asked to schedule appointments during specific hours, or have their own waiting area
- Use of incentives (discounts on health insurance, tax credit, coupons for baby supplies) or penalties (liability insurance, fees, etc)



**Other contexts in which lack of adherence to treatment affects the common good**

- Vaccination in adults, in healthcare workers
- Poor antimicrobial stewardship
- Lack of cooperation with quarantine
- Failure to comply with treatments that improve safety of others (sleep apnea, seizures)
- Second-hand smoke exposure

**Conclusions**

- Respond to families who decline recommended treatment with respect, listening and addressing concerns whenever possible
- Endeavor not to exclude patients from your practice unless substantial distrust develops, there are multiple philosophical differences on many aspects of care, or a poor quality of communication exists
- Be an example – get your flu shot
- Ideas are contagious! Be a public advocate for vaccine in the media and in your community

