Vaccine Exemptions –Evidence-base for a less restrictive option

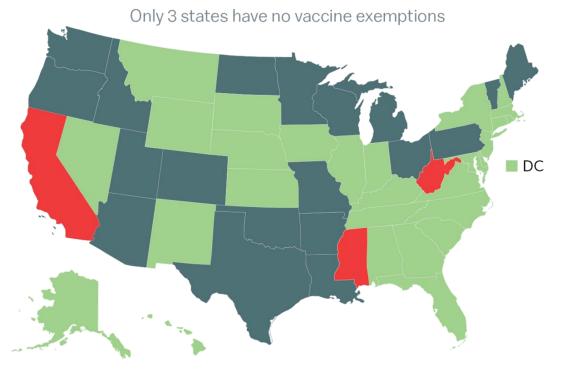
Saad B. Omer

William H. Foege Professor of Global Health Professor of Epidemiology and Pediatrics Emory University & Emory Vaccine Center

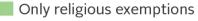
School Immunization Requirements

- State laws (not federal)
- Major role in low rates of vaccine preventable diseases
- Exemptions
 - Medical
 - Religious
 - Personal belief (philosophical) exemptions

School vaccine exemptions by state







Both religious and philosophical exemptions allowed

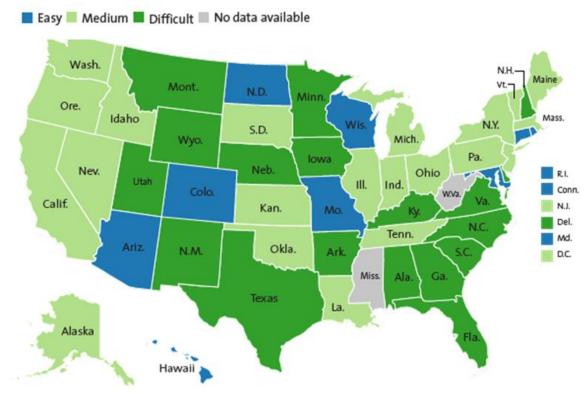


All states have medical exemptions.

 ${\it Missouri's philosophical exemption only applies to daycare, preschool and nursery school.}$

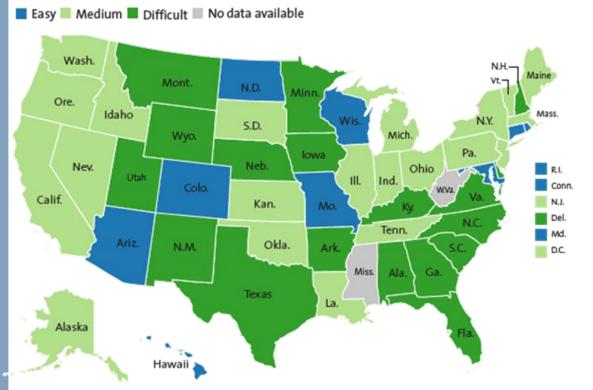
SOURCE: National Conference of State Legislatures

Ease of Obtaining Vaccine Exemptions –by State



Omer et al., New England Journal of Medicine . 2012 Figure (with updated 2013 data) created by Mother Jones

Ease of Obtaining Vaccine Exemptions –by State



Exemption Policies & Whooping Cough Incidence, 1986-2004

Exemption Incidence ease Rate

Difficult Reference

Medium 35% higher

Easy 53% higher

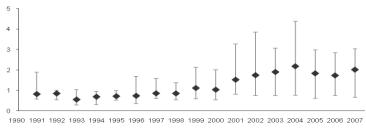
Omer et al., JAMA, 2006

Omer et al., New England Journal of Medicine . 2012
Figure (with updated 2013 data) created by Mother Jones

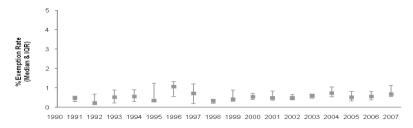
Nonmedical Exemptions by Ease of Exemption 1991 - 2007

Easy Exemption Policy

%Exemption Rate (Median & IQR)



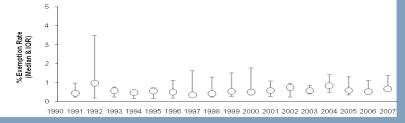
Medium Exemption Policy



Difficult Exemption Policy

Omer et al., Journal of American Medical Association, 2006

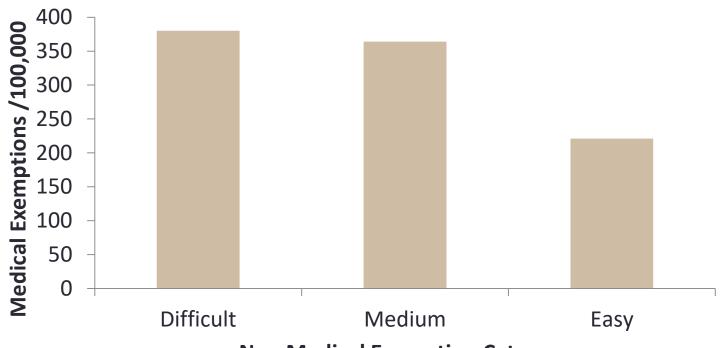
Data updated



Legislation Related to School Immunization Mandates, 2009-2012

- 36 immunization bills introduced
 - Restricting exemptions: 5
 - 3 passed
 - Expanding exemptions: 31
 - 0 passed

Association of State Non-medical Exemption Policies With Medical Exemption Rates



Non Medical Exemption Category

Stadlin, Bednarczyk, Omer JID 2012

Washington Exemption Law

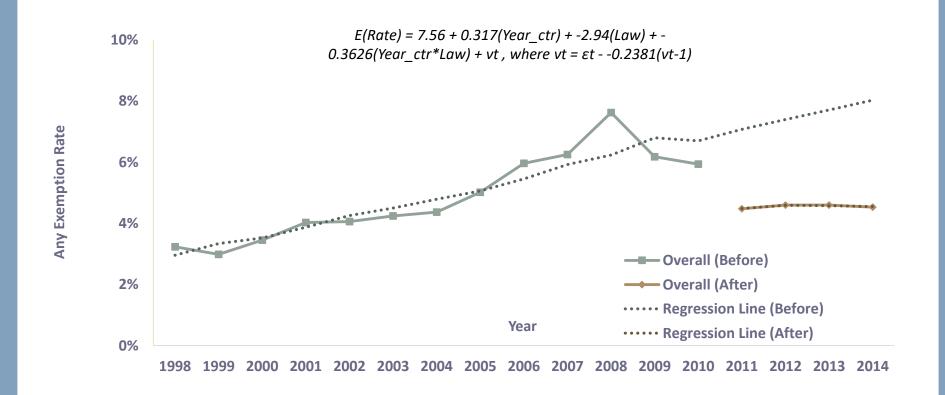
• SB 5005

Educational counseling and signed form from a licensed (in WA) health care provider in order to obtain a nonmedical exemption

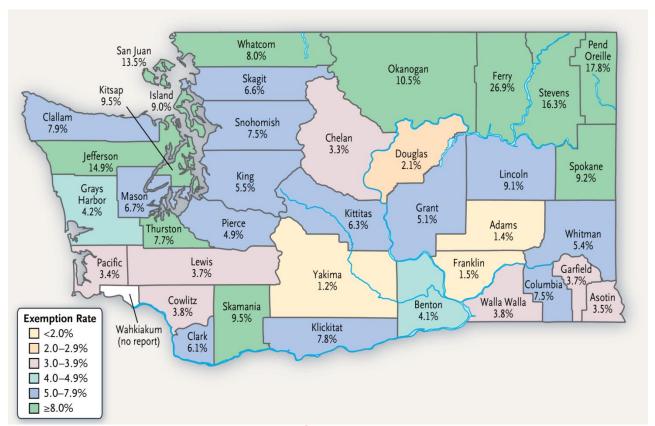
Law in effect July 22, 2011

1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014

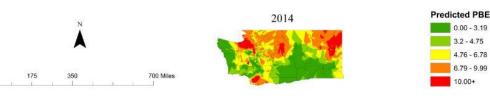
Impact of Change in Washington Exemption Law



WA State Counties' School Entry Exemption Rates - 2006-2007



Predicted PBE Rate (per 100), Washington 1998-2014 Predicted PBE Rate (per 100) 0.00 - 3.19 3.2 - 4.75 4.76 - 6.78



Ehe New How to H

How to Handle the Vaccine Skeptics

Sign a form that discusses the risks of non-vaccination

Letter elaborating on the reason their child should be exempt

In-person counseling

Obtain the form by specifically requesting one from the state or local health department,

vs. downloading it online

Procedures to review each request for exemption

Annual renewal

Omer, New York Times (Op-Ed), Feb 2015

Thank You!