



# Master of Public Health Capstone Project and Field Experience Presentation

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# Kansas Health Institute

Dates:  
January-  
May 2018



Site Supervisor: Charlie Hunt MPH, Senior Analyst

- Independent, non-university based research group, supported primarily through philanthropy
  - Kansas Health Foundation
- Diverse disciplines including medicine, public and community health, health policy and management, law, anthropology, political science, sociology, health administration, communications, journalism, and business
- Deliver objective information, conducts credible research
- Supports civil dialogue enabling policy leaders to make informed health policy decisions that enhance their effectiveness as champions for a healthier Kansas




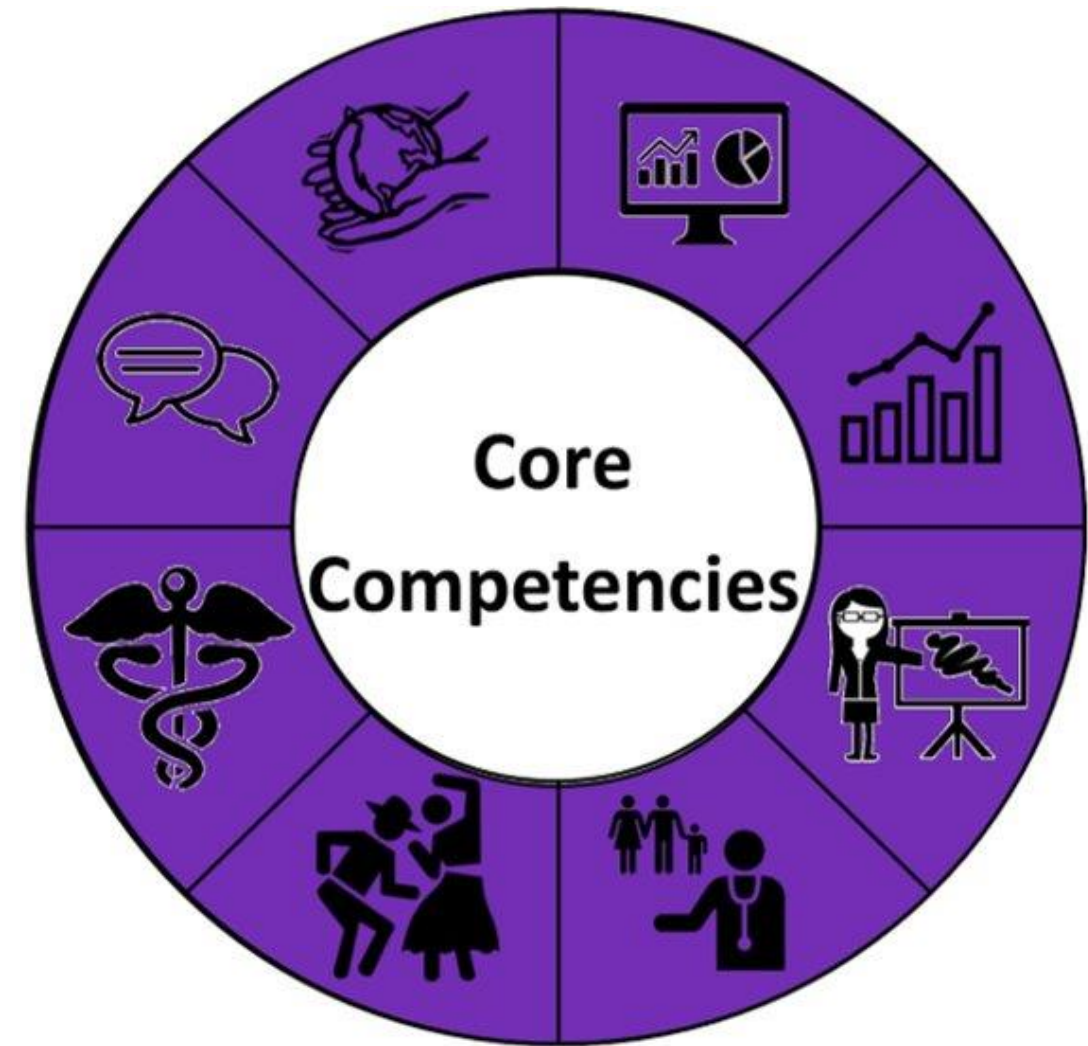
## Scope of Project

The focus for this field experience was to assess a public health policy regarding a model school exclusion policy for non-vaccinated students as distributed by the Immunize Kansas Coalition in 2016 through a survey for health coordinators in Kansas.

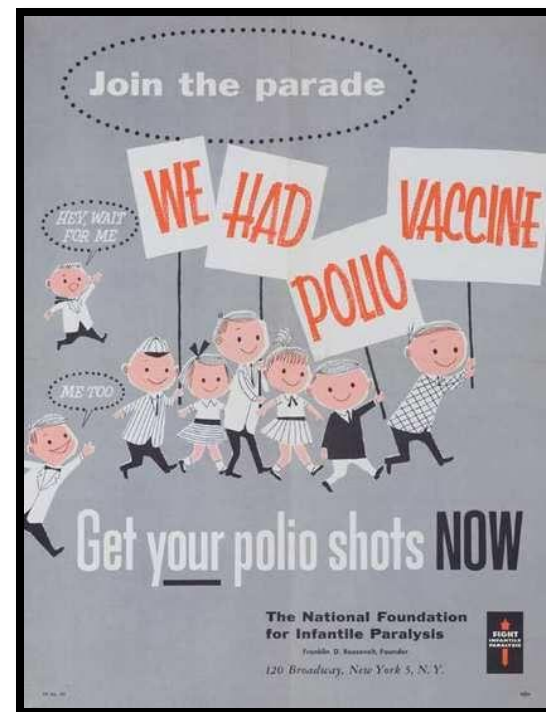
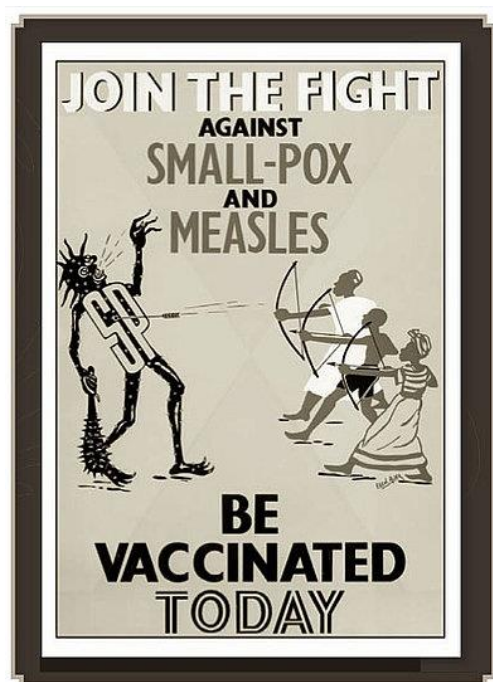


# Objectives

- Work with outside agencies to gather information for the report.
  - Collect data from school nurse survey regarding exclusion policies of the school/school system.
  - Analyze data from school nurse survey.
  - Review statewide exclusion policy. Analyze individual policies of exclusion in several school districts.
  - Literature review.
  - Review surrounding state policies regarding exclusion policies.
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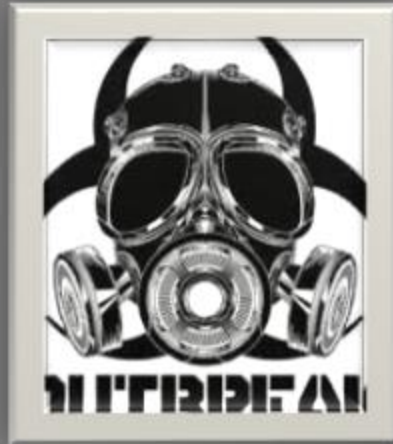
- Select quantitative and qualitative data collection methods appropriate for a given public health context
- Analyze quantitative and qualitative data using biostatistics, informatics, computer-based programming and software, as appropriate
- Interpret results of data analysis for public health research, policy or practice
- Assess population needs, assets and capacities that affect communities' health
- Apply awareness of cultural values and practices to the design or implementation of public health policies or programs
- Evaluate policies for their impact on public health and health equity
- Communicate audience-appropriate public health content, both in writing and through oral presentation



## Policy Review: School Exclusion Policy for Nonvaccinated Students



# Introduction





*Jenner vaccinated baby with the lymph from a cowpox-infected dairymaid. He also*

# History of Vaccination

15th Century Turks and Chinese

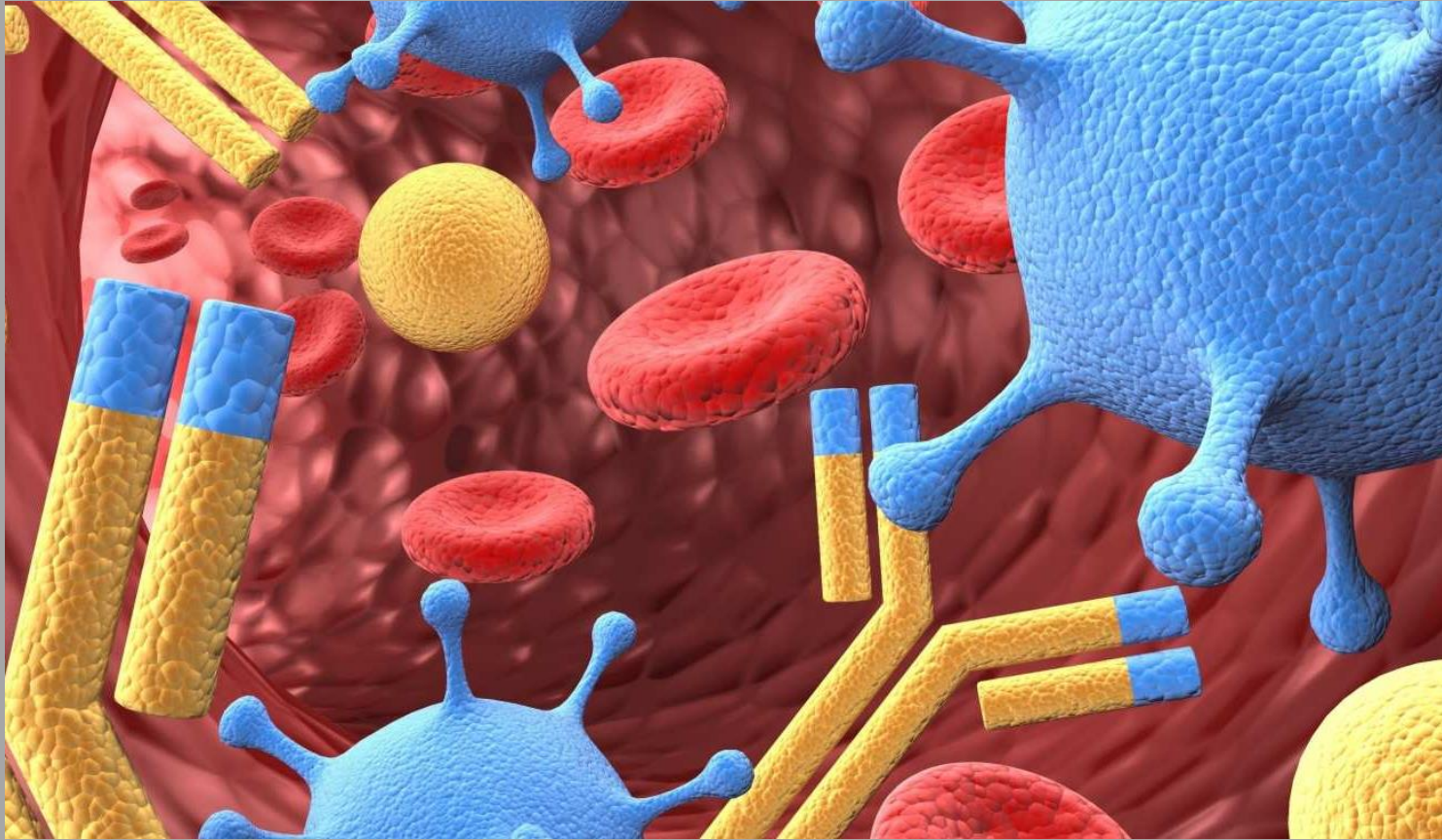
1718 Variolation brought to Europe

1798 Jenner develops smallpox vaccination

1880's Pasteur develops attenuated vaccination for cholera

1977 Smallpox is eradicated worldwide





# Immunology

- Types of Immunity
  - Passive Immunity
  - Active Immunity
- Types of viruses vaccinations use
  - Live Attenuated viruses
  - Inactive viruses

# CDC Immunization Schedule

- Most immunizations are recommended prior to kindergarten
- Schedule designed to minimize number of visits
- Minimizes missed time at work for parents (appointments or home with sick child)

## Vaccines are SAFE

- Common side effects are pain at the injection site, redness, and swelling or fever
- In rare cases there are more extreme side effects (seizures, severe infections and death)
- Side effects are closely monitored through the Vaccine Adverse Events Reporting System

**2018 Recommended Immunizations for Children from Birth Through 6 Years Old**

**Is your family growing?** To protect your new baby and yourself against whooping cough, get a Tdap vaccine. The recommended time is the 27<sup>th</sup> through 36<sup>th</sup> week of pregnancy. Talk to your doctor for more details.

Shaded boxes indicate the vaccine can be given during shown age range.

**NOTE:** If your child misses a shot, you don't need to start over, just go back to your child's doctor for the next shot. Talk with your child's doctor if you have questions about vaccines.

**FOOTNOTES:**  
 \* Two doses given at least four weeks apart are recommended for children aged 6 months through 8 years of age who are getting an influenza (flu) vaccine for the first time and for some other children in this age group.  
 † Two doses of HepA vaccine are needed for lasting protection. The first dose of HepA vaccine should be given between 12 months and 23 months of age. The second dose should be given 6 to 18 months later. HepA vaccination may be given to any child 12 months and older to protect against HepA. Children and adolescents who did not receive the HepA vaccine and are at high-risk, should be vaccinated against HepA.  
 ‡ If your child has any medical conditions that put him at risk for infection or is traveling outside the United States, talk to your child's doctor about additional vaccines that he may need.

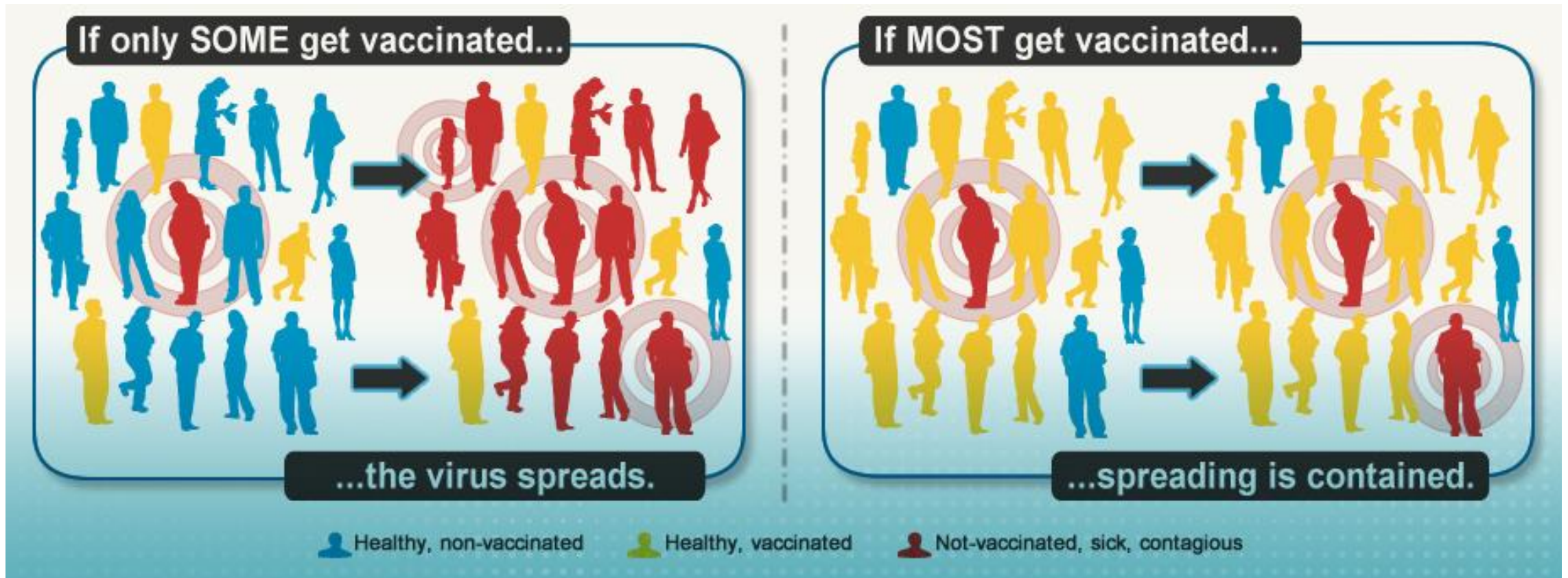
**SEE BACK PAGE FOR MORE INFORMATION ON VACCINE-PREVENTABLE DISEASES AND THE VACCINES THAT PREVENT THEM.**

For more information, call toll free 1-800-CDC-INFO (1-800-232-4636) or visit [www.cdc.gov/vaccines/parents](http://www.cdc.gov/vaccines/parents)

U.S. Department of Health and Human Services  
Centers for Disease Control and Prevention

AMERICAN ACADEMY OF FAMILY PHYSICIANS  
STRONG MEDICINE FOR AMERICA

American Academy of Pediatrics  
DEDICATED TO THE HEALTH OF ALL CHILDREN™



# Herd Immunity

**JOIN THE FIGHT!**



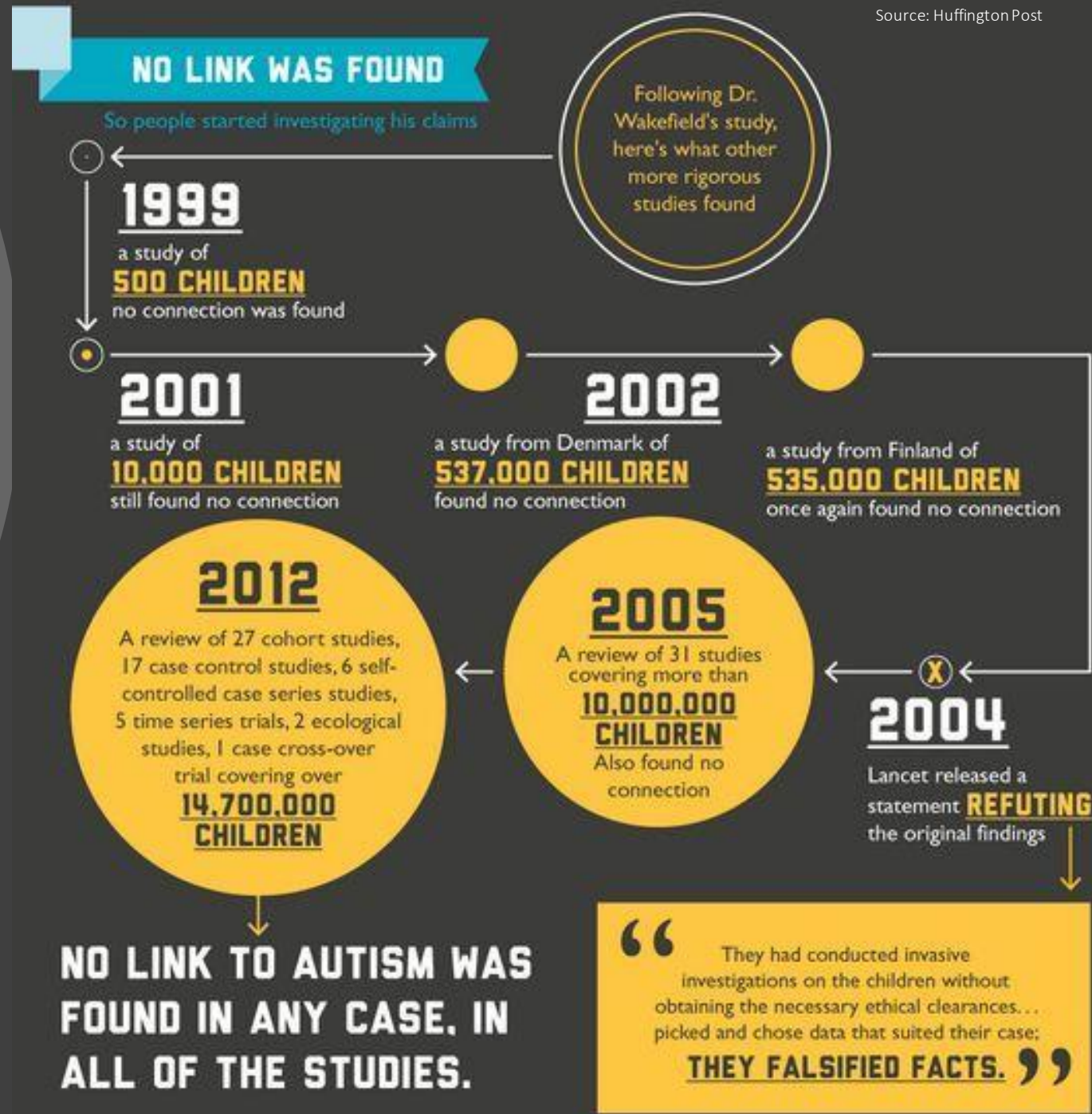
**AGAINST  
VACCINATIONS**

## Reasons for Non-medical Exemptions

- Religious
- Political Libertarians
- Individuals that can calculate the benefit/risk on their own

# Role of Web 2.0\*

- Artificial sense of community
- Echo chamber of personal beliefs
- Example "Wakefield"



Applies to interactive platform usage, such as social media, blogs and community powered websites



# Outbreaks

- Mass Gatherings are at an increased risk of diseases because of excessive crowding, shared accommodations and prolonged exposure

- Pilgrimages
- Olympics
- Disneyland

- Communities with common interests, or religious backgrounds are at a risk

- Roma in Bulgaria
- Amish communities
- Charter Schools



# Global Issues

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- Anti-Vaccination Leagues England
- Declining numbers of vaccinated children lead to massive outbreaks in Europe
- 2016 No Jab, No Pay

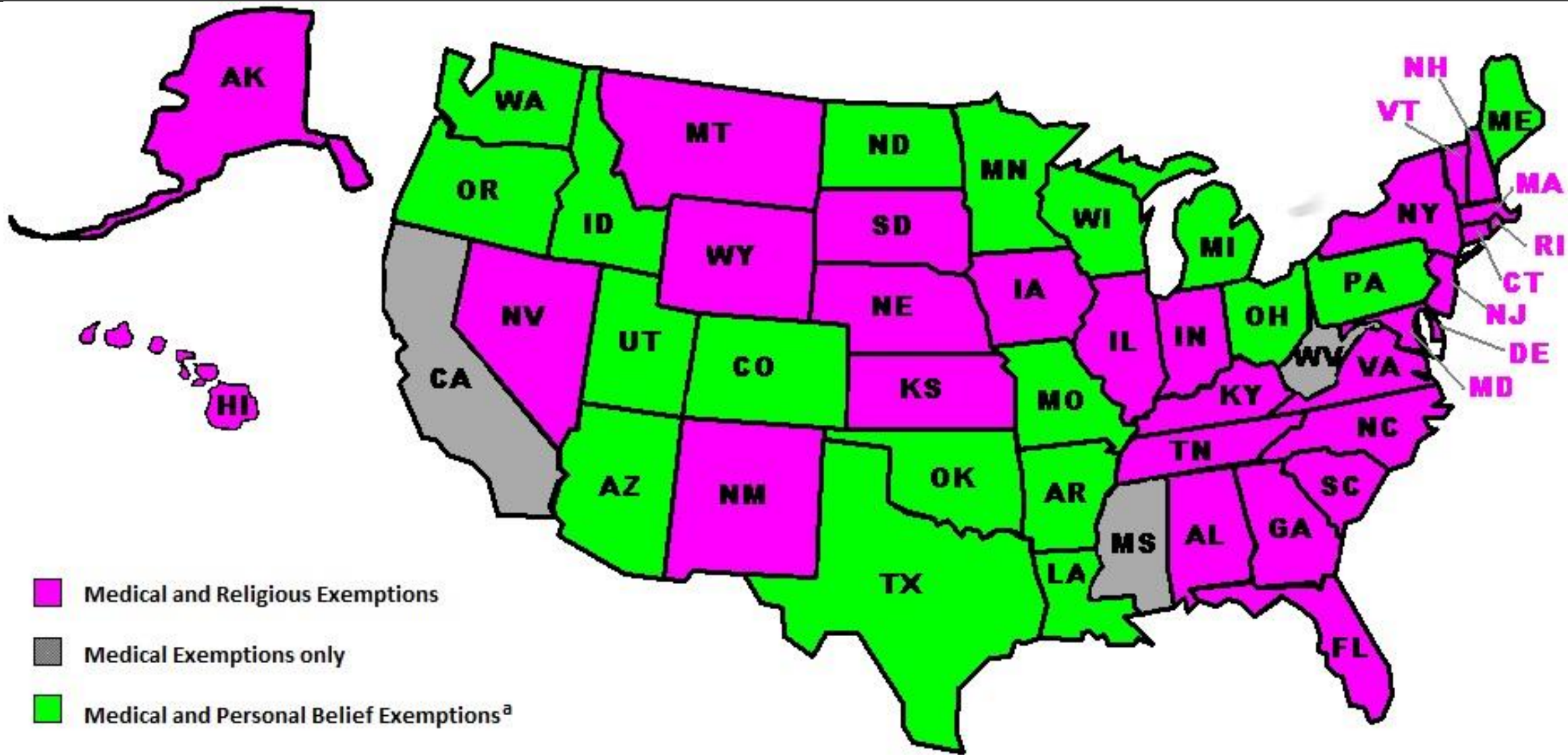
# US Legislation

- *Jacobson v the State of Massachusetts* 1905
  - **Case:** Mandatory vaccination violates civil liberties
  - **Ruling:** The state has the right to impose mandatory vaccination if it is for the benefit of the community
- *Zucht v King* 1922
  - **Case:** Student should be able to attend school without vaccinations
  - **Ruling:** The individual state had the right to impose laws for the safety of the state





# Exemptions



# Midwest Plains Region

State	Policy	Type of Exemption	How to obtain	Expiration
Colorado	W/in 14 days of notification	Medical/Religious/Personal	Online Form	June 30th Annually
Nebraska	Prior to enrollment	Medical/Religious	Notarized forms	Annually
Missouri	Prior to enrollment	Medical/Religious	Certificate	n/a
Oklahoma	Prior to enrollment	Medical/Religious/Personal	Letter	n/a
Kansas	n/a	Medical/Religious	Letter	n/a

# Kansas Statute



- Kansas state law requires students enrolled in school to be immunized with vaccines designated by the Kansas Department of Health and Environment (KDHE)
  - Allows for exemptions on medical or religious grounds (K.S.A. 72-5209 *et seq.*).
- Local school boards and governing authorities of nonpublic schools are authorized to exclude students who have not been vaccinated according to the requirements (K.S.A. 72-5211a).
  - Each district/governing body has the ability to create their own policies regarding exclusion at the individual level
  - As a result these policies vary greatly from district to district

- In July 2016, the Immunize Kansas Coalition (IKC) – a group of Kansas providers, health department officials, researchers and educators working together to improve vaccine rates and protect Kansans against vaccine-preventable diseases – distributed a model school immunization exclusion policy to all school nurses in Kansas.
  - Written school policy
  - Exclusion date 6 weeks after enrollment date



**IMMUNIZE  
KANSAS  
COALITION**

The image features a dark gray background with a central white horizontal band. Behind the band, three overlapping circles in shades of blue are visible, creating a layered effect. The word "Methods" is centered within the white band.

# Methods

# Methods

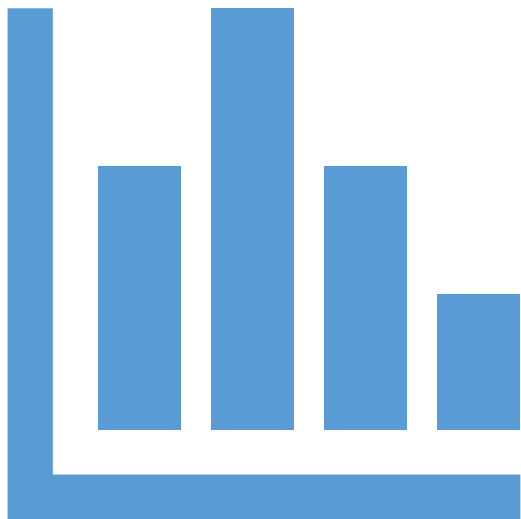


- Literature review to understand policies of Kansas and surrounding states
- Qualtrics Survey emailed to **Health Coordinator** for each district
- Primary sources were KDHE Kindergarten Immunization Survey and School Nurse Survey
  - Total of 8 questions
- Results are reported by population density groups: Frontier, Rural, Dense Rural, Semi Urban and Urban
- Results are also reported by KDHE district regions: Northwest, Southwest, North Central, South Central, Northeast and Southeast

# School Nurse Survey- Background

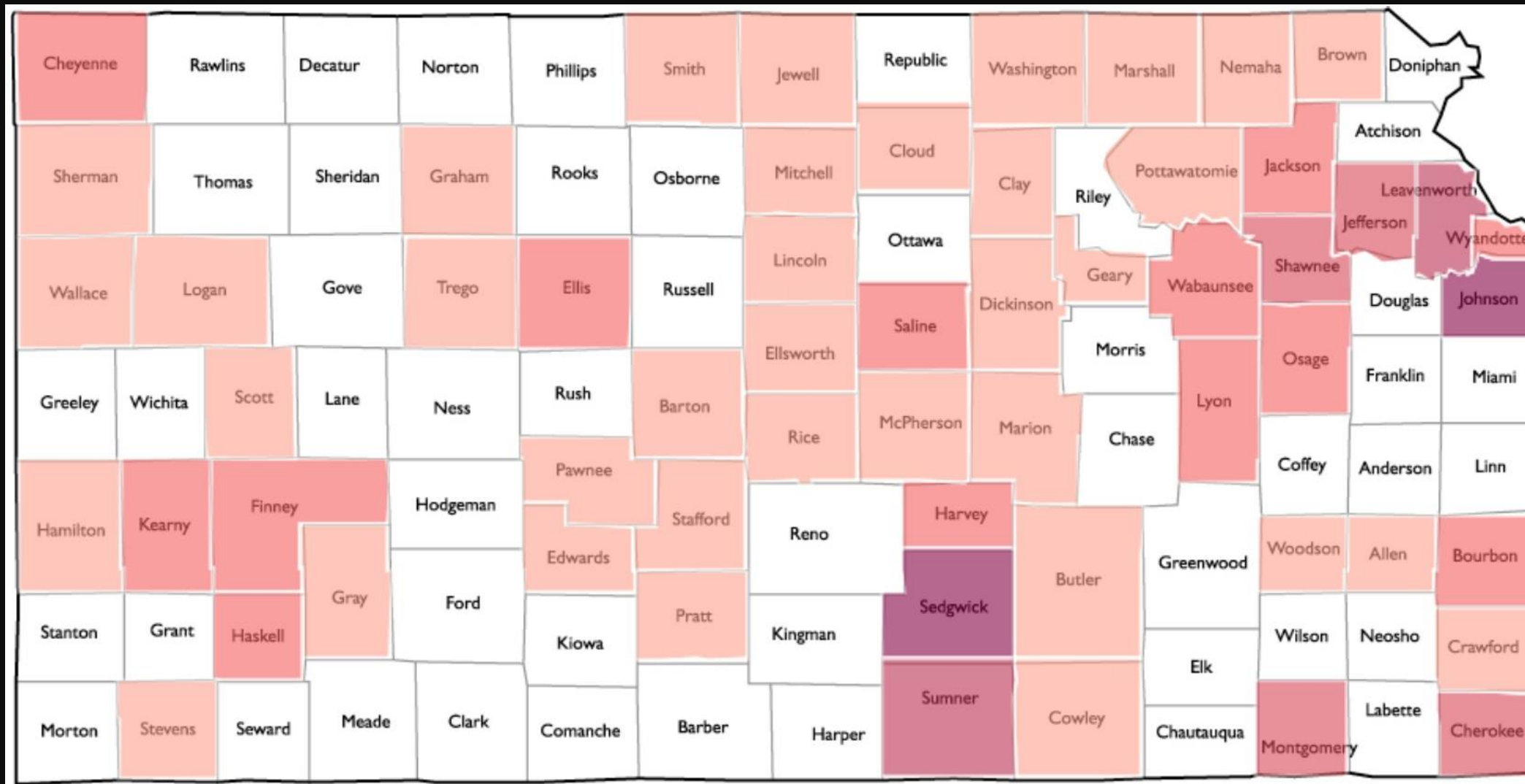
- Annually, KDHE sends out a school nurse survey
  - There had been a lapse in this being sent for 2 years
  - Survey of public schools and accredited private schools in the state
    - To study the school nurse workforce
    - Management of students with chronic diseases
    - Health screenings data
    - Immunization policies
      - Added to this section were questions about:
        - IKC's model policy
        - Grace periods
        - Exclusion policies



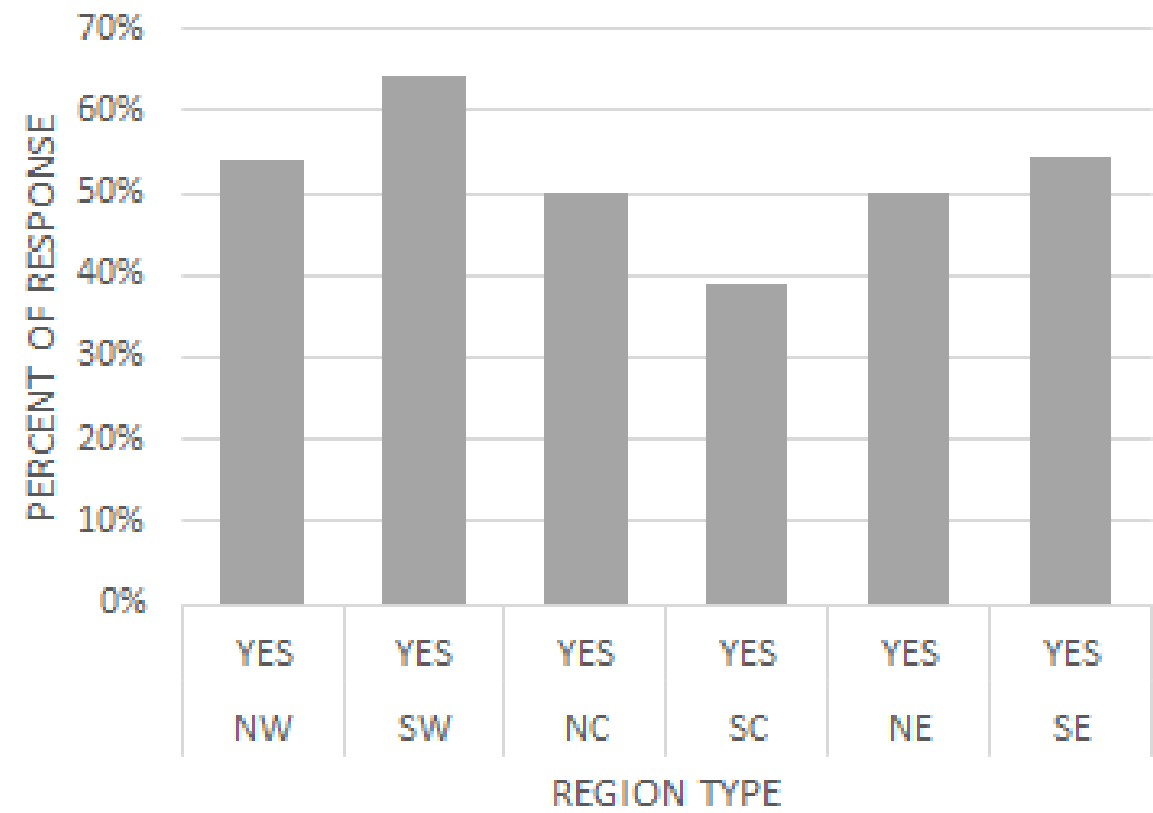
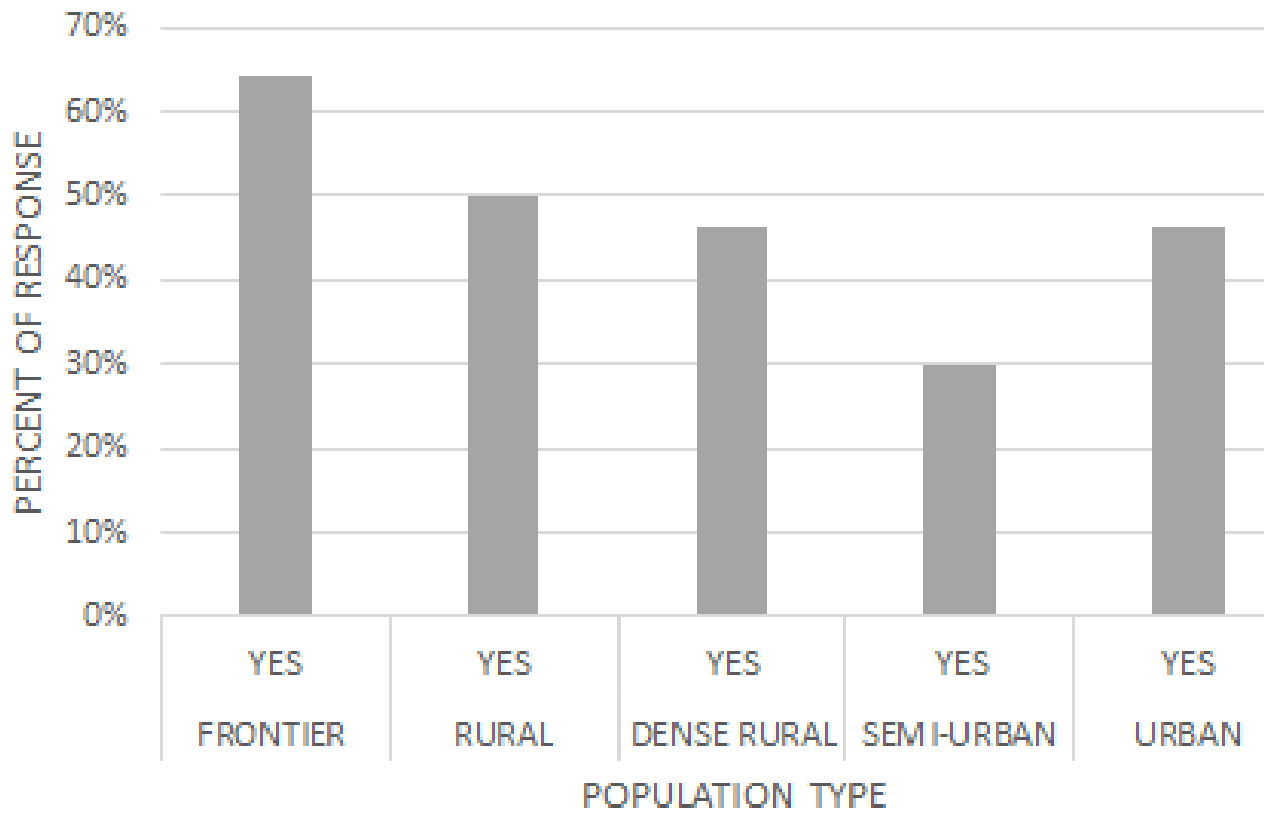


Results





- 25% of Districts responded in full to the Survey by March 30th
- 30% Public Schools 11% Private
- Due to low return rate from Private schools further data will be reported by District Regions or Population Density



- 49% YES
- 51% NO
- (n=99)

Do you recall seeing the IKC Policy sent out July of 2016?

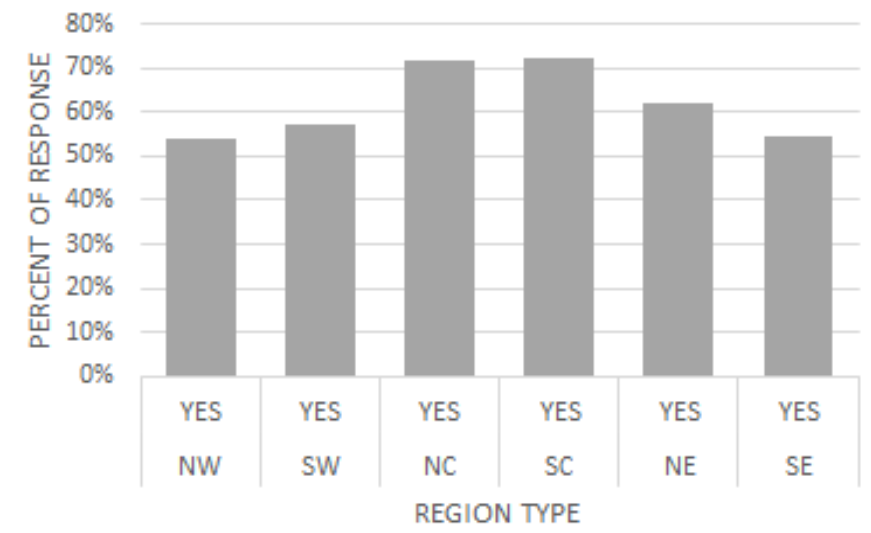
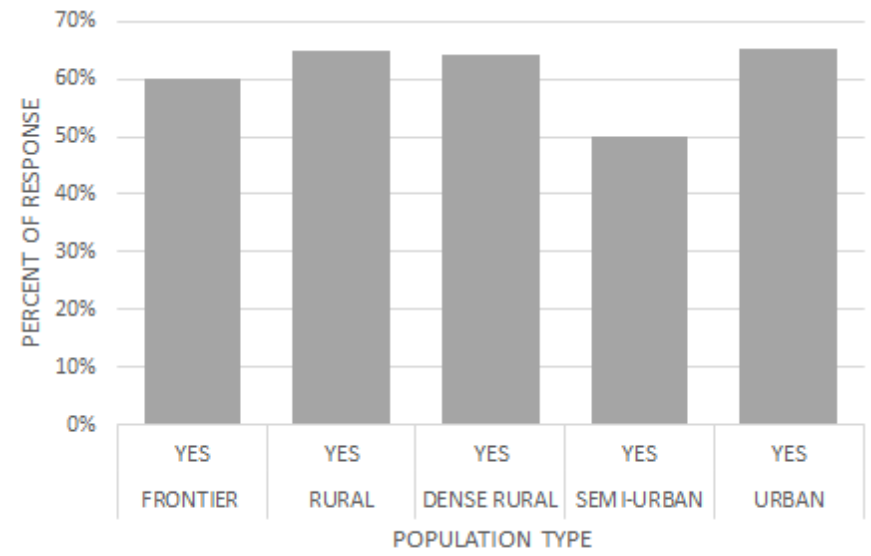
# Does your district have a written immunization exclusion policy?

63% YES

23% NO

14% UNSURE

(n=99)



# When was your district's immunization exclusion policy adopted? (n=33)

• Prior to 1989: 13% (4)

20% (6)

After 2015: 37% (11)

1989

1990–1999

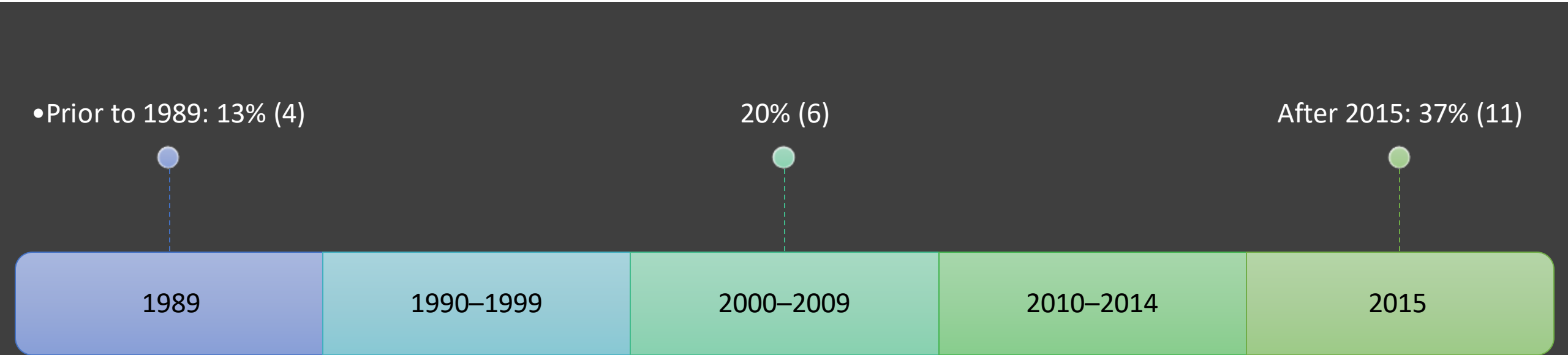
2000–2009

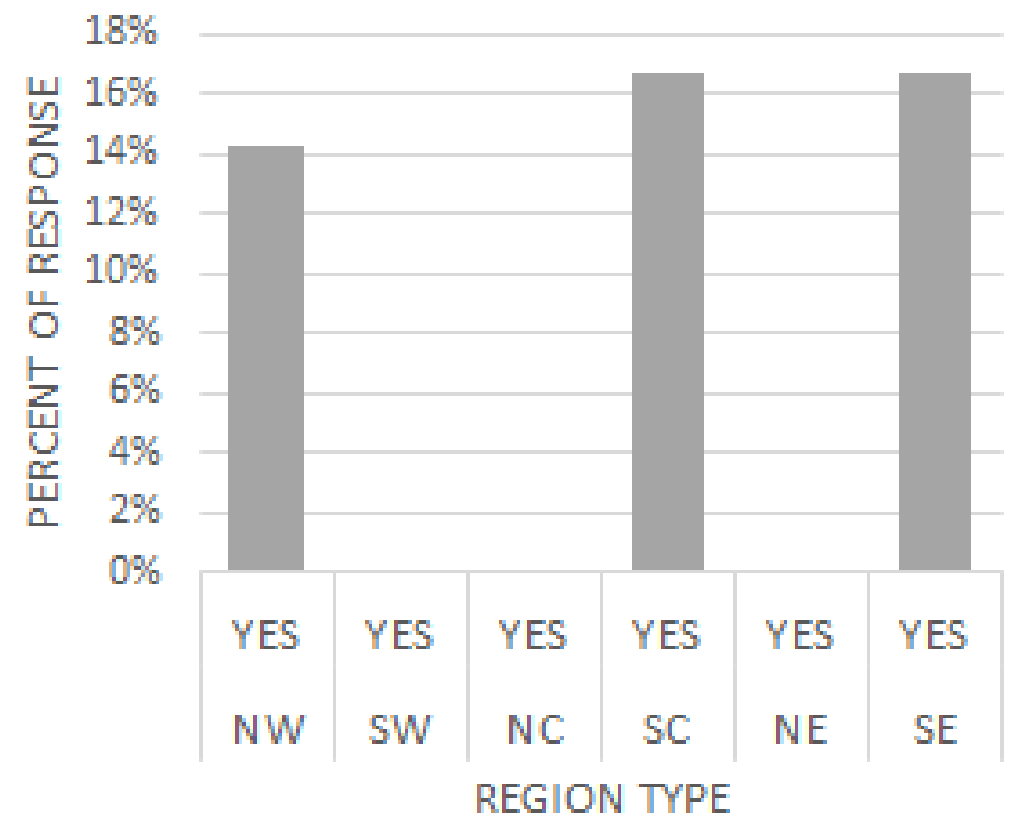
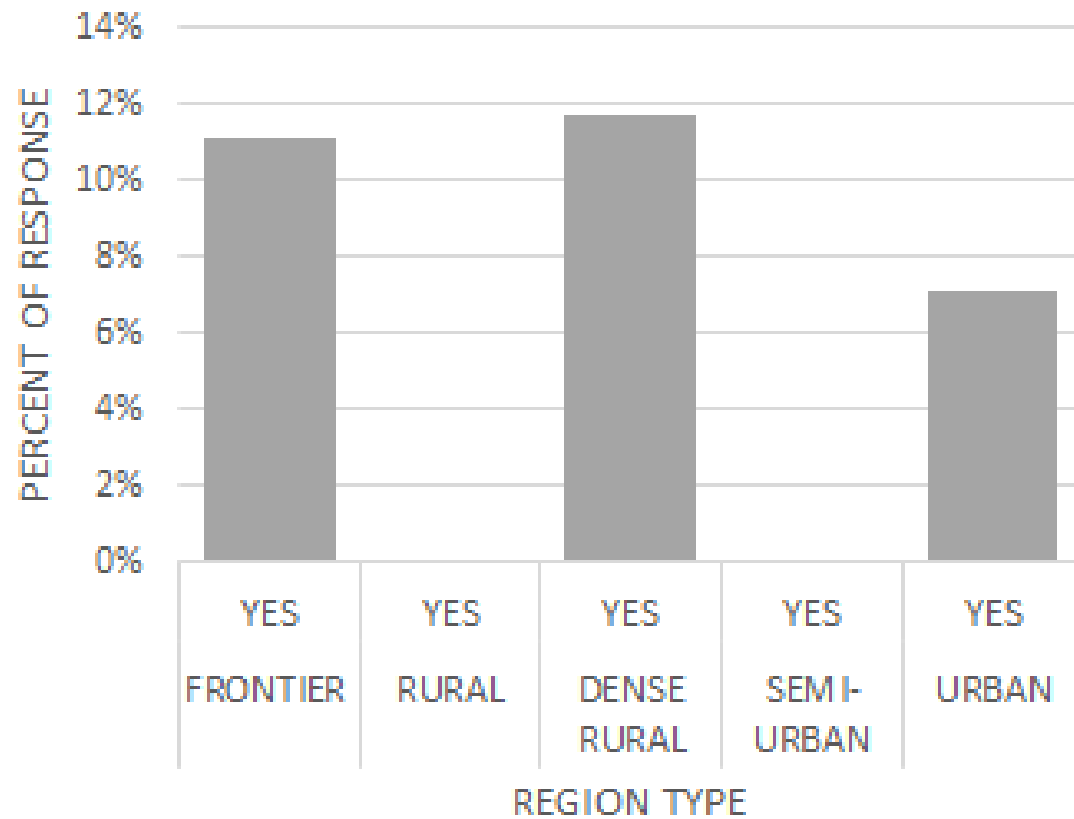
2010–2014

2015

10% (3)

20% (6)





Did your district either adopt or revise its immunization exclusion policy in response to receiving the IKC Model Policy?

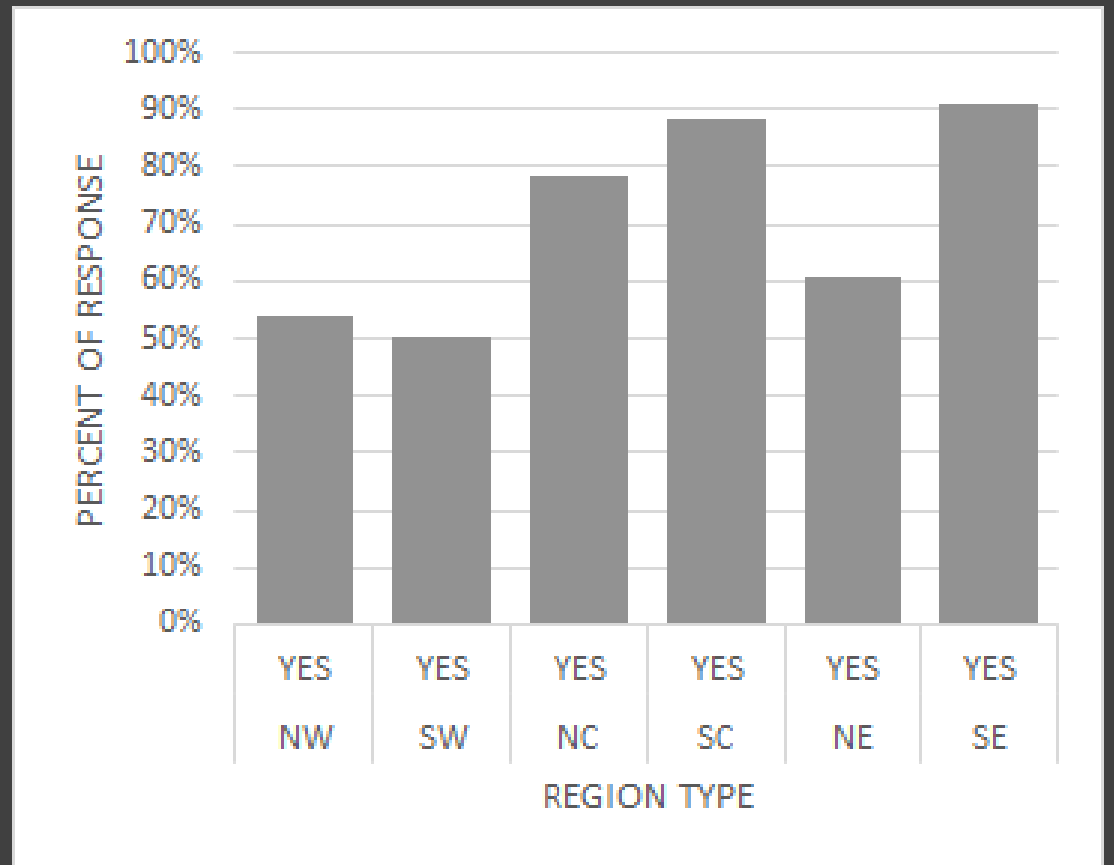
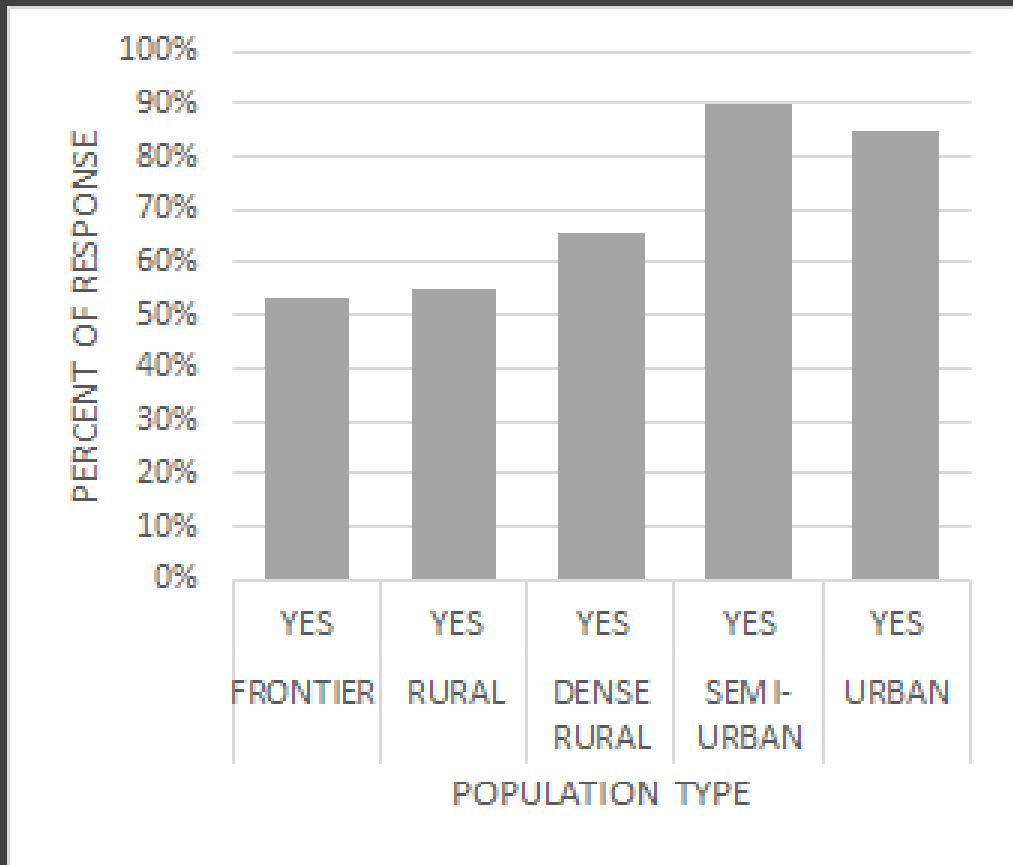
7% (4) YES

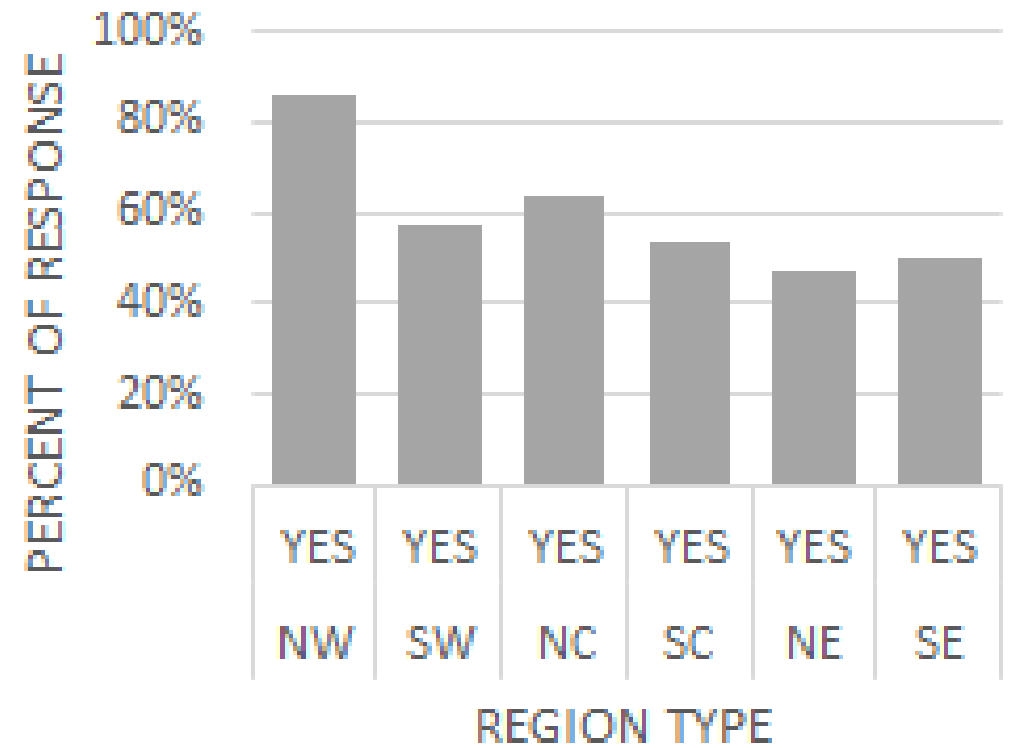
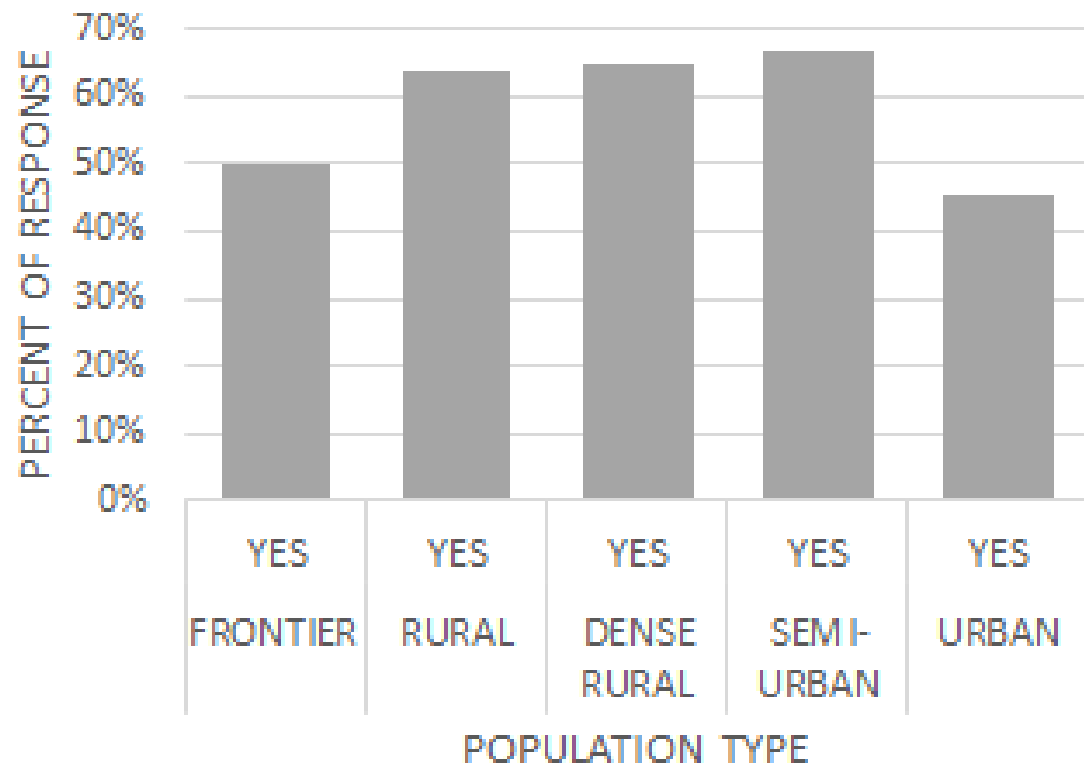
59% (34) NO  
(n=58)

34.5% (20) UNSURE

# With or without a grace period, does your district exclude students who have not received the required immunizations and who do not have a medical or religious exemption?

**69% (67) YES      27% (26) NO      4%(4) UNSURE      (n=97)**





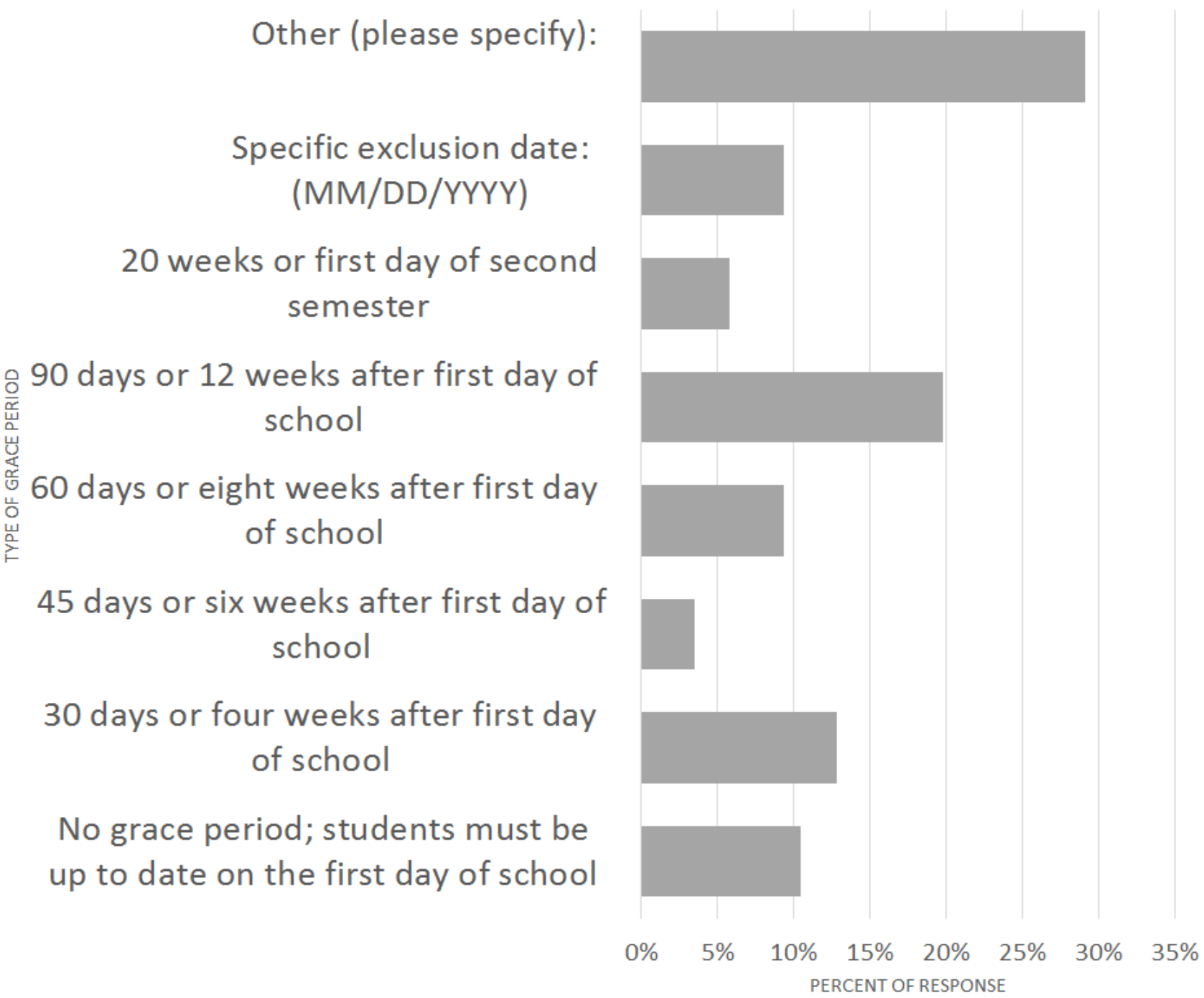
Outside of a grace period, does your district allow for exceptions to excluding students, either informally (e.g., case by case basis) or by policy (e.g., parents or guardians sign a statement that they understand the risks, etc.)?

57% (38) YES

34% (23) NO

9% (6) UNSURE

(n=67)

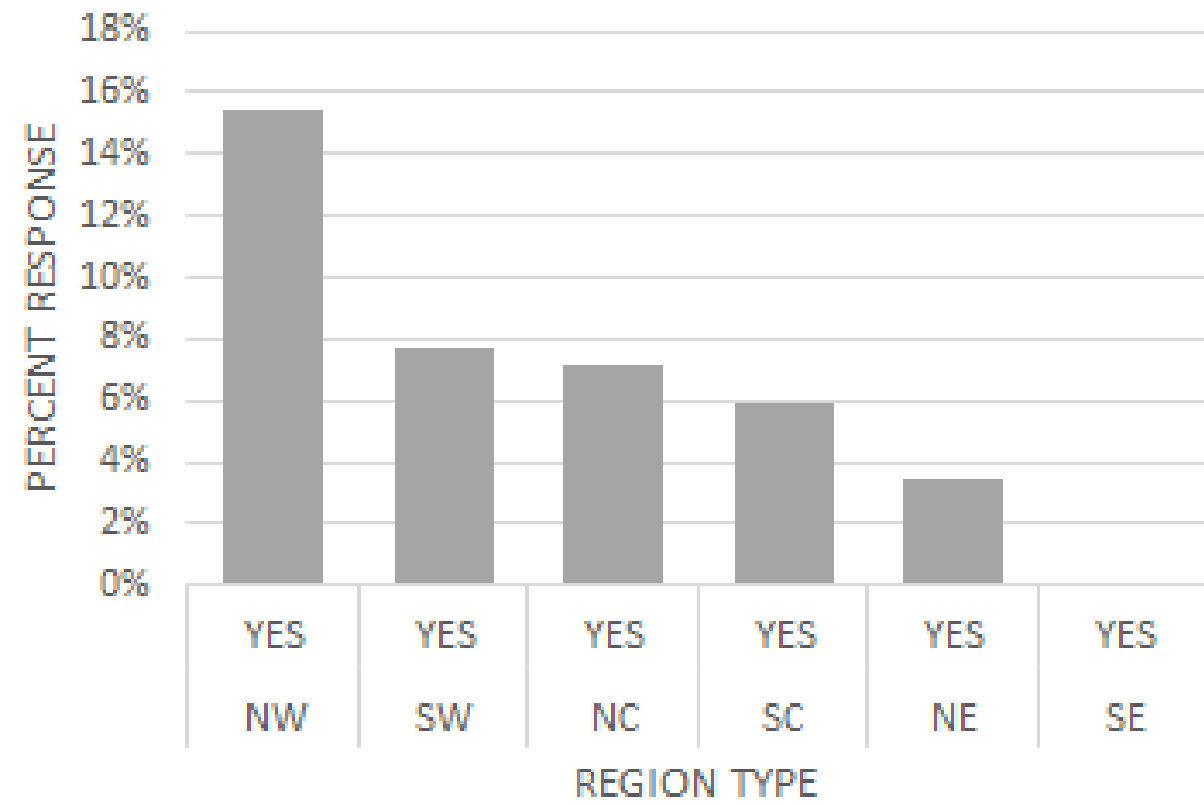
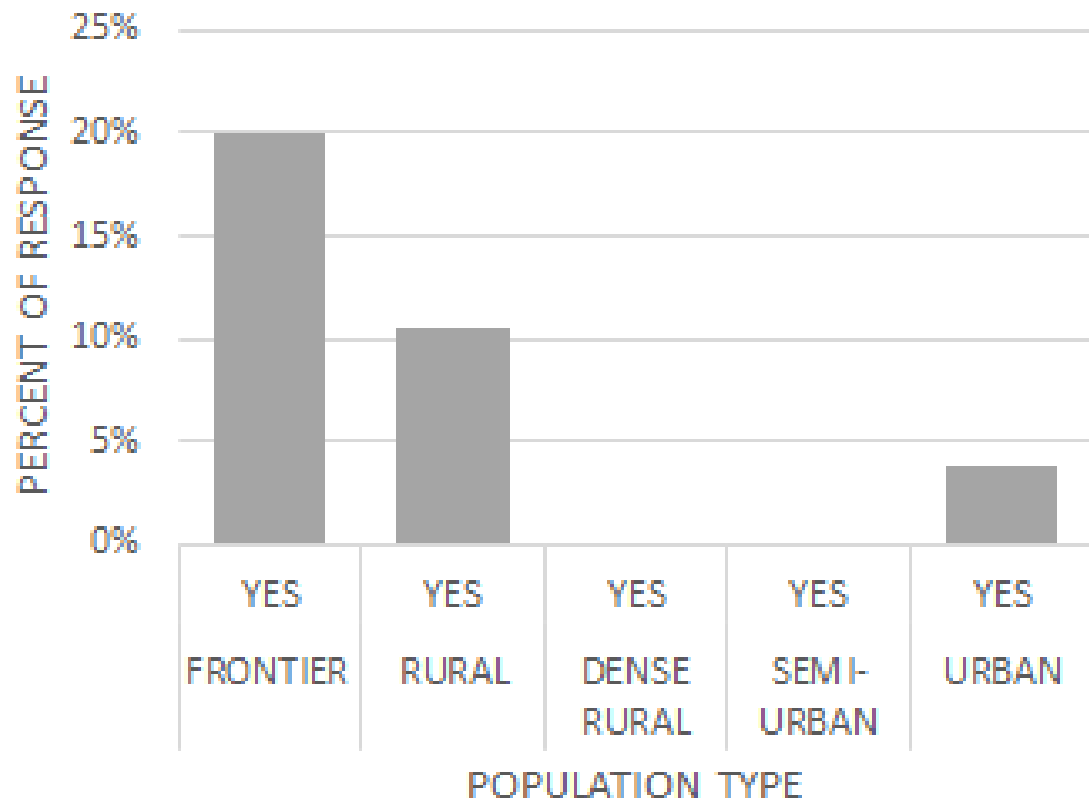


According to either your district's written policy or informal practice, how long is the grace period for students to begin receiving required immunizations before they are excluded? (n=86)



**Respondents replying  
'other' to grace  
period (n=25)**

- 48% (12) indicated that they do not exclude, so there was no need for an exclusion policy,
  - 59% (7) send reminders to parents to get children up to date on immunizations,
  - 8.% (1) indicated they were all up to date,
  - 8.% (1) did not exclude because it was more important to have students in school.
  - 25% (3) indicated they only excluded if there is a disease outbreak and they student is not immunized.
- 36% (9) indicated that they exclude during the month of October.
- 8% (2) determine their exclusion date by when the principal, or school nurse decide of the individual school.
- 4% (1) indicated the students must be up to date by the end of the first semester.
- 4% (1) indicated they had 7 days from enrollment.

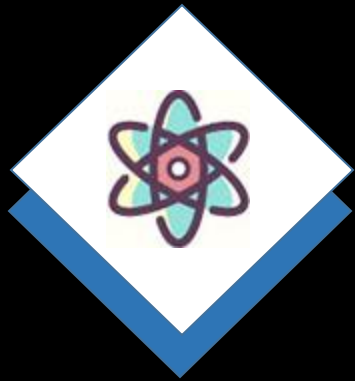


Does your district intend to modify its immunization exclusion policy in the next 12 months?

6% (6) YES    49.5% (48) NO    44% (43) UNSURE    (n=97)

# Why change the district policy?

(n=6)



33% (2) responded they were changing the policy as the current policy was not being followed.



17% (1) wanted to change the policy to allow students to stay in school when doctor's appointments exceeded the exclusion date.



17% (1) will change the policy to follow recommendations.



17% (1) will change the policy to put a specific date in it.



17% (1) are changing the policy by putting one in place.

# Discussion

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# Discussion



- Exclusion policies support school districts in the event of a vaccine preventable outbreak by providing a consistent message.
- Grace periods within the first 6 weeks of school are good incentives to ensure immunization or documentation
- 43% of policies haven't changed since 2000
  - There is no major indicator there is a plan to change these policies
- 39% of grace periods are after 60 days
- Frontier and Rural counties indicate they are less likely to exclude than Semi-Urban or Urban counties
- 57% indicate they allow exceptions to exclusion on case by case basis
  - Decreasing consistency

# Discussion continued



- The CDC believes vaccines are the second best thing to happen to public health
  - Water is first
- Vaccinations are victims of success
- Accessibility of information
- Schools have same concerns as mass gatherings
  - Confined space
  - Prolonged exposure
- As there are changes in legislative process there is a need to review and update policies regularly



# Questions?

Contact: Jeni McDonald    [ozchild@ksu.edu](mailto:ozchild@ksu.edu)