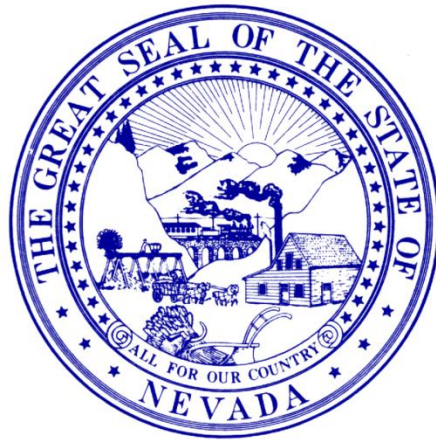


Nevada State Immunization Program



2013 - 2017 5 Year Strategic Plan

Developed by:

Nevada State Immunization Program
Bureau of Child, Family & Community Wellness
Nevada State Health Division
Department of Health & Human Services

Developed in Collaboration with:

Carson City Health & Human Services
Immunize Nevada
Southern Nevada Health District
Southern Nevada Immunization & Health Coalition
Washoe County Health District

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Brian Sandoval
Governor

Richard Whitley, MS
Administrator

Michael J. Willden
Director

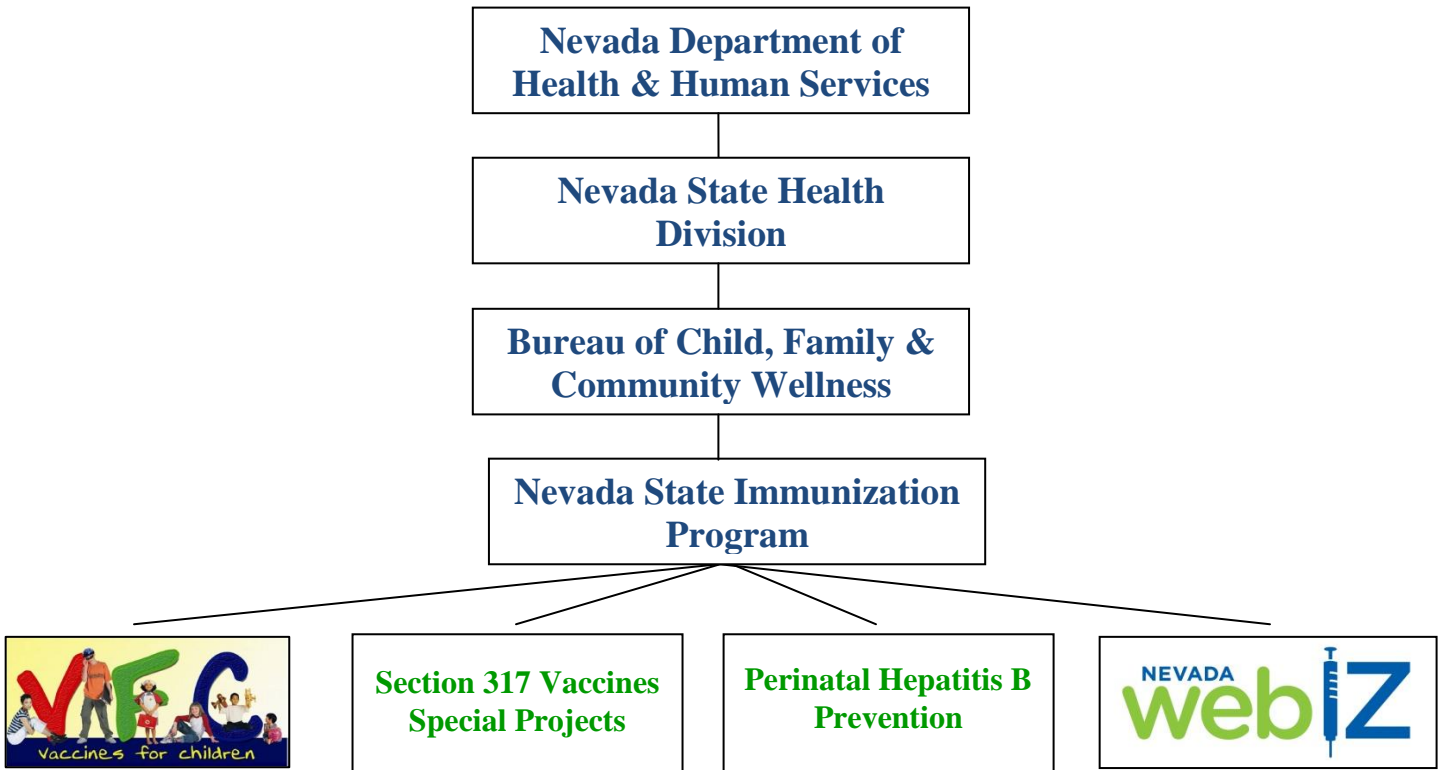
Tracey D. Green, MD
State Health Officer

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INTRODUCTION

The Nevada State Immunization Program (NSIP) operates under the direction of the Nevada State Health Division within the Department of Health & Human Services. Federal funds from the Centers for Disease Control and Prevention (CDC) are the sole source of program operations. The NSIP has four components primarily focusing on Vaccines for Children (VFC) Program, Special Projects, Perinatal Hepatitis B Prevention, and Nevada WebIZ (the statewide immunization registry).



Vision

To prevent vaccine-preventable disease morbidity and mortality by increasing immunization rates among children, adolescents, and adults in Nevada.

Mission

To work with state and county health agencies and the private medical community to promote vaccinations among infants, children and adults; to respond to vaccine preventable disease outbreaks; to develop and promote maternal and adult immunization education programs; to develop and enforce state immunization and vaccine preventable disease regulations and laws; to provide immunization education to healthcare professionals and consumers; to develop and implement systems to assess immunization levels; to conduct immunization audits of county health districts, public health clinics and private physicians who administer state-supplied vaccine; and to prevent the transmission of hepatitis B in Nevada through the perinatal and universal hepatitis B prevention programs.

NSIP Program Components



Vaccines for Children (VFC) Program

The VFC Program was created in 1994 by the federal government and is a federal entitlement program aimed at improving vaccine availability. This program provides no cost vaccines to children aged birth through 18 years who meet at least one of the following criteria:

- Eligible/enrolled in Medicaid
- Uninsured
- Underinsured
 - Children who have private health insurance but the coverage does not include vaccinations
 - Children whose insurance covers only selected vaccines
 - Children whose insurance caps vaccination coverage at a certain amount
 - As of 1/1/2013, all underinsured children will have to go to a deputized provider for VFC vaccine
- Are of American Indian, Native American, or Alaska Native heritage, regardless of insurance status
- Enrolled in Nevada Check-Up.

If children are eligible for the VFC Program, they are entitled to receive all vaccines that are recommended by the CDC's Advisory Committee on Immunization Practices (ACIP).

Parents and guardians can obtain vaccinations for their children in three primary ways: 1) if VFC eligible, receive vaccines from a VFC enrolled provider at no charge, but responsible for the administration fee; 2) visit a community clinic that offers vaccines for free or at a reduced price; or 3) visit a medical provider that offers privately stocked vaccinations. In Nevada the administration fees associated with each VFC vaccine is capped at \$22.57 per vaccination and office visit fees associated with each access point vary.

The NSIP is responsible for supplying enrolled providers with vaccine for children who are eligible for the VFC Program. Every month providers can request vaccines from the NSIP. Only two locations in the United States have VFC vaccines – McKesson in Sacramento and McKesson in Nashville. Nevada's distribution site is Sacramento.

Section 317 Vaccines - Special Projects

Section 317 is a discretionary federal grant program to all states, 6 cities, territories and protectorates. The NSIP has primarily used Section 317 vaccines for special projects such as:

- Influenza for adults and children at school located clinics or Public Health Preparedness Points of Dispensing (POD's),
- Influenza and Tdap in the OB/GYN setting for pregnant women,
- Tdap administered in birthing hospitals for parents or grandparents of a newborn
- Twinrix (Hepatitis A & B) for high risk adults
- Back-to-School events
- National Infant Immunization Week events.

New 317 Rule – as of 10/1/2012

Every year Section 317 funds to purchase vaccines have been decreasing and becoming more restricted. The process to order these vaccines is the same as the VFC Program. Additionally, providers must be enrolled in the 317 Program to receive 317 vaccines.

Starting October 1, 2012, 317 vaccine will no longer be allowed to be administered to any person regardless of insurance status. The new rule states that 317 vaccine will only be allowed on individuals who are “uninsured” or underinsured.” Verbal confirmation from the patient can be used.

If a child is uninsured or underinsured, then they are VFC eligible. However, the following situations will allow for 317 vaccine to still be used on children:

- Hepatitis B birth dose (vaccine costs will be split between VFC and 317)
- Pandemic exercises such as POD events
- Outbreak situations.

The NSIP will continue to use Section 317 vaccine for the following:

- Adult Tdap for cocooning in birthing hospitals & OB/GYN clinics
- Adult influenza for cocooning in OB/GYN clinics
- Twinrix for high risk adults
- Hepatitis B birth dose
- Pandemic exercises such as POD events (regardless of insurance status)
- Outbreak situations (regardless of insurance status)
- Other adult vaccines for uninsured & underinsured adults.

Perinatal Hepatitis B Prevention

Since 1991, the CDC has annually awarded funds to support perinatal hepatitis B prevention programs among the 64 immunization grantees. These programs have made great strides in the prevention of hepatitis B transmission from infected mothers to infants. The transmission of hepatitis B from the mother to her newborn can be prevented by vaccinating the newborn with hepatitis B immune globulin (HBIG) and hepatitis B birth dose vaccine within 12 hours of birth, and ensuring that the child completes the hepatitis B vaccination series. HBIG and the hepatitis B birth dose are 85-95% effective in the prevention of hepatitis B infections in infants born to women who are positive.

The NSIP is responsible for administering the Perinatal Hepatitis B Prevention Program. The NSIP and/or local health districts are mainly responsible for the following:

- Case management of infants born to hepatitis B positive mothers to ensure infant receives hepatitis B birth dose, complete hepatitis B of series, and return for post-testing
- Identifying household and sexual contacts of hepatitis B positive women, determine susceptibility, and vaccinate when needed
- Educating providers and delivery hospitals to routinely screen pregnant women for hepatitis B during each pregnancy
- Educating delivery hospitals on the hepatitis B birth dose and address barriers to implementing policies
- Conducting hospital medical record reviews and surveys to determine if hospitals are testing for and vaccinating against hepatitis B.

Nevada WebIZ

In 2003, the NSIP introduced an electronic immunization registry or immunization information system (IIS) called Nevada WebIZ.

WebIZ is the name of the application created by Envision Technology Partners, Inc.



Immunization registries are confidential, population-based, online computerized databases that collect vaccination data on individuals in a specific geographic area, such as a state. Immunization registries are used as a tool to gather vaccination records from multiple providers, and in turn, consolidate the records in one location.

Nevada WebIZ allows registered users including doctors, nurses, medical assistants, health departments, hospitals, urgent cares, schools, pharmacies, child care centers, and other professionals to record vaccinations they administered or to access information about their patients' vaccinations, including vaccinations given at other medical offices. The system makes it simple to keep track of a patient's vaccinations even if the patient visits more than one physician.

Nevada WebIZ is a population-based immunization registry. Per Nevada Revised Statute (NRS) 439.265 and corresponding regulations all vaccines administered in Nevada must be recorded into Nevada WebIZ, unless a person chooses to opt-out. This law went into effect for children on July 1, 2009 and adults on January 28, 2010.

Funding

Financial Assistance - Operations

The NSIP receives all funds to operate the program from the CDC. Approximately \$3 million is received on an annual basis (calendar year) to support program objectives and activities. Unlike other grants, these funds come in ROUNDS. The NSIP typically receives three rounds of funding with the first round also estimating the total amount to be funded for the calendar year.

Funds are awarded in the following CATEGORIES per round:

- Personnel (state FTE and temporary contractors)
- Fringe
- Travel
- Supplies (office supplies, vaccination supplies, Pink Books, thermometers)
- Equipment (\$5,000 purchase per item)
- Subgrants/Contracts
- Other (emails, phones, servers, postage, memberships, registration fees, printing,
- Indirect.

Within each CATEGORY, funds are also awarded per FUNDING SOURCE:

- 317 Operations (sub-org 00)
- VFC Operations (sub-org 01)
- VFC Ordering (sub-org 02)
- VFC/AFIX (sub-org 04)
- Pandemic Influenza (sub-org 05).

Round 1 Example

Nevada		Total Award	317 Operations Sub-org 00	VFC Operations Sub-org 01	VFC Ordering Sub-org 02	VFC AFIX Sub-org 04	Pan Flu Sub-org 05
PROGRAM OPERATIONS	FINANCIAL ASSISTANCE						
	Personnel	\$383,420	\$269,170	\$11,870	\$72,220	\$30,160	
	Fringe	\$62,951	\$40,494	\$3,576	\$9,797	\$9,084	
	Equipment	\$0					
	Supplies	\$5,047	\$5,047				
	Travel	\$9,080	\$9,080				
	Other	\$75,840	\$61,458			\$14,382	
	Contracts	\$920,420	\$9,124	\$289,536		\$437,760	\$184,000
	Indirect Costs	\$39,186	\$31,577	\$1,174	\$2,359	\$4,076	
	FA TOTAL	\$1,495,944	\$425,950	\$306,156	\$84,376	\$495,462	\$184,000

Direct Assistance – Spend Plan

The NSIP receives federal vaccine funds on an annual basis (approximately \$29 - \$35 million) to purchase vaccines for the VFC Program and Section 317. The funds are not given directly to Nevada. Instead the funds reside at the CDC and are managed by Nevada staff through a Spend Plan located in VTrckS (online application). The Spend Plan is managed on a monthly basis per federal fiscal year (October 1 – September 30).

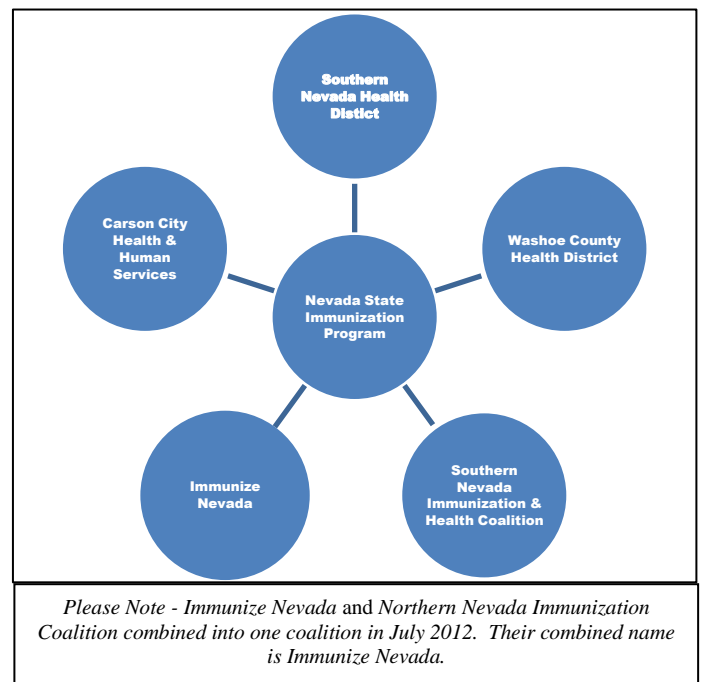
Nevada Check-Up

The Nevada Division of Health Care Financing and Policy (Nevada Medicaid) allocates state general fund dollars with a federal match for the immunization of Nevada Check-Up (S-CHIP) children. These general funds are provided to the NSIP which then allows the program to provide vaccines for these children using CDC contract prices.

Nevada Check-Up is managed on a monthly basis. In order to implement this program, VFC vaccines are “borrowed” for Nevada Check-Up children and then “replaced” by purchasing new vaccines to be shipped to McKesson with Nevada Check-Up funds.

About NSIP and Collaboration

Collaboration and key partnerships are continually being fostered statewide to address Nevada’s immunization crisis and implement data and evidence-based strategies for improving childhood immunization coverage. The NSIP subgrants funds to three local health districts and two coalitions to conduct activities to increase immunization rates such as VFC/Assessment, Feedback Incentives, and eXchange (AFIX) site visits, perinatal hepatitis B prevention, provider education, and educating Nevadans about the importance of vaccinations. These sub-grantee organizations include: Immunize Nevada, Southern Nevada Immunization & Health Coalition, Carson City Health & Human Services, Southern Nevada Health District, and Washoe County Health District. Working together through advocacy, outreach, education, clinical services and grass roots efforts, these organizations are the go-to sources for vaccinations and immunization information throughout Nevada.



2007 – 2011 Strategic Plan

Under the direction of Doug Banghart (NSIP Program Manager from 2007 - 2008), a five year strategic plan was developed for 2007 – 2011. This plan focused on:

- Developing a budget enhancement request for submission to the 2007 legislative session to fully staff and fund the immunization registry at necessary levels. (supported - not funded)
- Developing an immediate interim plan, including funding mechanisms, to create a sustainable immunization registry infrastructure that involves technical support, training, and back data entry to ensure active maintenance of 75% of providers who are currently enrolled in the registry.
- Developing a budget enhancement request for submission to the 2007 legislative session to fully fund a collaborative agreement with one of the three major medical societies to develop a peer-to-peer provider education network. (supported - not funded)
- Implementing a peer-to-peer provider education intervention strategy in at least half of all provider offices that have low immunization coverage levels.
- Developing a budget enhancement request for submission to the 2007 legislative session to fully fund several, multi-year public-private partnerships between clinics and public health agencies to expand access to vaccination services to hard-to-reach clients. (supported - not funded)
- Developing a budget enhancement request for submission to the 2007 legislative session to fully fund SHOT team nurses to be placed in WIC clinics to offer vaccinations to this at-risk population. (supported - not funded)
- Issuing a request for proposal to non-profit clinics and public health agencies for expanding access to vaccination services.
- Hiring at least 4 experienced nurses to be placed in large WIC agencies to provide collocated immunization services to WIC clients. (funding not provided)
- Developing a budget enhancement request for submission to the 2007 legislative session to fully fund several, multi-year public-private partnerships between community-based organizations and public health agencies to provide enhanced education and outreach activities (such as reminder/recall) to pockets-of-need areas. (supported - not funded)
- Issue a request for proposal to community based organizations and public health agencies to provide enhanced education and outreach activities to pockets-of-need areas.
- Develop a budget enhancement request for submission to the 2007 legislative session to fully fund an annual contract with the University of Nevada School of Public Health to measure immunization coverage levels among two year olds in Nevada. (supported - not funded)
- Develop a CDC-approved, population based survey methodology to measure vaccination coverage levels among Nevada's two year olds.

What Was Implemented?

Several items were implemented from the 2007 – 2011 Strategic Plan. This included:

- Nevada WebIZ state law. Per NRS 439.265 and corresponding regulations, on July 1, 2009 all vaccines administered to children must be recorded into Nevada WebIZ. On January 28, 2010, adults were included as well. Therefore, Nevada WebIZ is now a mandatory population-based immunization registry. However, people have the option to opt-out, but must complete paperwork in order to do so.
 - As of January 3, 2013, Nevada WebIZ had:
 - 1,237 providers,
 - 2,257 clinics,
 - 10,278 active users,
 - 2,431,886 patient records,
 - Over 25.8 million vaccinations.

- Legacy data entry. With American Recovery & Reinvestment Act (ARRA) funds, over 78,000 historical vaccinations were recorded into Nevada WebIZ for children born January 2007 to December 2011.
- Increased Nevada WebIZ staffing. In total, there are currently seven full-time employees. This includes: 1 Nevada WebIZ Manager, 1 Help Desk Manager, 1 Help Desk Specialist, 3 Trainers, and 1 HL7 Technician.
- Peer-to-peer education was not created, but statewide provider education efforts have been created by the coalitions. This includes NILE Webinars, provider educational events, provider reminder/recall efforts, and Medical Assistant trainings.
- WIC Immunization Linkage. Southern Nevada Immunization & Health Coalition in partnership with State WIC, has created a WIC Immunization Linkage Project. This project includes educating WIC staff about the importance of vaccinations, providing incentives to parents who get their child(ren) immunized, providing parents with vaccination information, providing parents with information on location of VFC providers, and hiring nursing staff to host vaccination clinics next to WIC locations.

Purpose of the 2013 – 2017 Strategic Plan

Despite collaborated efforts of the aforementioned organizations, and efforts with other healthcare organizations, non-profit organizations, and private practices across the state, Nevada’s immunization rates are continually below the national average. Per the National Immunization Survey (NIS) conducted annually by the CDC, Nevada has historically had low immunization rates relative to other states for the recommended childhood immunization series for 19 – 35 month old children and has consistently been ranked near the bottom. Nationally, immunization rates have generally remained around 70% or higher, while rates for Nevada remain lower. Additionally, the NIS publishes single antigen rates. Even with some of the single antigen rates being above the national average, Nevada’s rates and ranking will only improve when a child is up-to-date on all recommended vaccinations and not just a select few.

See Appendix A for Immunization Rate Trends.

PURPOSE OF STRATEGIC PLAN

To develop strategies to improve Nevada’s immunization rates and ranking.

GOALS

By 12/31/2017, improve Nevada’s immunization rate to at or above the national average for children 19 – 35 months of age, improve adolescent immunization rates on recommended vaccines, and improve adult immunization rates for influenza and Tdap.

Improvements will be based upon the NIS, BRFSS, and Nevada IIS.

The need for a new five year strategic plan was identified during the 2011 Annual Statewide Immunization Meeting (September 21, 2011). During this meeting it was discussed that there are many issues that are influencing Nevada's low immunization rates for children 19 – 35 months of age. Some of the issues identified were:

- Lack of new strategic plan
- Not enough VFC providers
- Economy
- No immunization champion
- Lack of American Academy of Pediatrics (AAP) members
- Lack of immunization enforcement in child care centers
- Transient population
- Doctors following alternative schedules
- Private providers not purchasing private vaccines
- Lack of media messages.

There were also several strategies identified to help improve Nevada's immunization rates:

- Focus on children 0 – 35 months of age
- Create five year strategic plan focused on children 0 – 35 months of age
- Look at strategic plans of other VFC states
- Recruit more VFC providers
- Recruit immunization champion
- Partner with other public health programs
- Health plans need to promote vaccinations to their members
- Obtain CDC Public Health Advisor.

NSIP initiated a strategic planning process to identify immunization best practices for the target age group through surveys, interviews, informal focus groups and evaluating plans of other regional immunization programs. Information was obtained through the following resources to identify best practices and determine next steps for developing this strategic plan:

- Evaluation of 2010 NIS data
- One-on-one interviews with subgrantees conducted by the NSIP Program Manager
- Professional focus groups with parents in northern and southern Nevada
- Professional focus groups with Nevada healthcare providers in northern and southern Nevada (pediatricians, nurses, medical assistants)
- Interviews with immunization experts in the west coast region including Arizona, Colorado, New Mexico, Oregon and Washington
- Statewide planning meetings to identify and agree on key focus areas.

The top five focus areas that were chosen (in no particular order) to focus on children 0 – 35 months of age:

- Increase awareness and participation in the VFC Program
- Increase provider education
- Increase reminder/recalls
- Strengthen collaboration with partners
- Increase messaging.

Two additional focus areas were added for adolescents and adults. This was due to the CDC wanting these areas included in state strategic plans.

Research

As the strategic plan was being initiated, Immunize Nevada began preliminary research to determine what needs exist in Nevada that must be addressed in order to increase immunization rates. After reviewing the NIS from past years, Immunize Nevada identified five states which had overcome similar obstacles that Nevada is currently facing when it comes to poor immunization rates.

The five states researched included: Arizona, Colorado, New Mexico, Oregon and Washington. These five west coast states have similar statewide outreach programs/coalitions that are comparable to the outreach efforts and goals of Immunize Nevada. By conducting in-depth interviews with each of the program directors, Immunize Nevada was able to obtain insight into barriers and challenges that each of the states are currently facing or had dealt with in previous years. Additionally, Immunize Nevada asked about current campaigns and programs that are being utilized in the coalitions which have a positive impact on immunization rates in their states. Overall, the research identified activities that Nevada is already conducting or will conduct and similar barriers.

See Appendix B for summaries of this research.

Focus Groups

After assessing the need for a strategic plan, Immunize Nevada organized focus groups in order to receive feedback from the sources who have the most impact on Nevada's immunization rates—Parents and Healthcare providers. Immunize Nevada contracted with KPS3 Marketing to conduct four focus groups—Two focus groups targeted parents and two targeted physicians, nurses and medical assistants. Each focus group was conducted in Las Vegas and Reno. Additionally, online surveys were also completed by each group. By bringing in an outside marketing company, Immunize Nevada was able to remove themselves from the interviews in order to obtain real and straight forward answers in a setting where participants felt comfortable to provide their true opinion.

Recommendations Based Upon Parent Focus Groups & Survey:

- Provide factual information to parents on vaccine preventable diseases, vaccine safety, and importance of vaccination through many media outlets
- Provide information to parents at time of birth
- Create public portal to vaccination records for parents to access
- Provide information during pregnancy
- Continue to provide reminders for vaccinations (Text4Baby, phone calls from doctor, etc)
- Promote how to get free vaccines to parents.

Recommendations Based Upon Provider Focus Groups & Survey:

- Provide factual information to parents on vaccine-preventable diseases, vaccine safety, and importance of vaccination through many media outlets
- Improve reimbursement of vaccinations with insurance companies
- Improve purchasing costs of vaccines for providers
- Increase the number of providers who are interfacing their EMR with Nevada WebIZ.

Please see Appendix C for entire report.

FOCUS AREAS

The NSIP, in collaboration with subgrantees, created Focus Areas 1 - 5 to help increase immunization rates for children 0 – 35 months of age. Focus Areas 6 and 7 will focus on increasing adolescent and adult rates. During 2013 – 2017, the NSIP and subgrantees will be responsible for implementing components of the seven focus areas into their scope of work.

Focus Area #1: Increase Awareness and Participation in the VFC Program

Focus Area 1 will focus on children 0 – 35 months of age.

The VFC Program is a vital component to increasing Nevada’s immunization rates. Without the VFC Program, thousands of children would go unvaccinated. As of June 2011, Nevada had 276 enrolled VFC providers of which 270 were active. This low number of VFC providers has led to access problems in rural Nevada and in specific zip codes in urban areas.

In August 2011, the NSIP hired a VFC Provider Recruiter. This position was responsible for recruiting new VFC providers and trying to get providers that had dropped out back into the program. These job duties have now been combined into the Vaccine Manager duties. With the assistance of the county health districts, the state Vaccine Manager will have a better knowledge of providers in the community who could potentially become a VFC provider.

In April 2012, Nevada Medicaid passed allowances for pharmacies to be reimbursed the administration fee for vaccinating VFC children. In Nevada, pharmacists can vaccinate anyone of any age, but corporate policies limit the age of which the pharmacist can vaccinate. With persuasion, corporate age policies could potentially be lowered.

Additionally, AFIX visits are critical to improving immunization rates. When a provider actively participates in an AFIX visit and implements the suggestions, immunization rates have been proven to increase.

Recently, Immunize Nevada updated a logo for statewide use. In the past, a consistent logo was helpful in branding vaccination messages and education to providers, parents, community partners, etc.

See table below for strategies that were identified by the state and the subgrantees.

Focus Area #1: Increase Awareness and Participation in the VFC Program	
Activity	Responsible Party
Recruit and retain VFC Providers (pharmacies when possible, schools, family medicine, providers who have left the VFC Program, etc. especially in pockets-of-need locations)	Nevada State Immunization Program County Health Districts
Increase regular AFIX beyond 2 visits	Nevada State Immunization Program County Health Districts
Increase provider education about VFC Program	Nevada State Immunization Program County Health Districts Coalitions
Re-launch logo and use in all allowable materials	Nevada State Immunization Program County Health Districts Coalitions

Focus Area #2: Increase Provider Education

Focus Area 2 will focus on children 0 – 35 months of age.

Provider education is a vital component to increasing immunization rates. Several methods are currently being used such as: NILE webinars, MA trainings, Nevada WebIZ trainings, annual immunization conference, provider educational events, VFC/AFIX visits, etc. Even with the current provider trainings already being used, provider staff turnover is always an issue. Therefore it is critical that provider trainings continue and increase. It is also critical to evaluate provider education to determine the effectiveness and make necessary changes based upon evaluation results.

See table below for strategies that were developed by the state and subgrantees.

Focus Area #2: Increase Provider Education	
Activity	Responsible Party
Educate child care centers, pharmacists, pediatricians, career colleges, doctors, etc. on the importance of vaccinations and how to use Nevada WebIZ	Nevada State Immunization Program County Health Districts Coalitions
Educate providers who have high rates of alternative schedules	Nevada State Immunization Program County Health Districts
Implement and conduct mandatory provider trainings starting with 2013 VFC Provider Agreement	Nevada State Immunization Program
Conduct provider educational events on vaccination schedules, VFC Program, vaccine storage & handling, billing, WebIZ, fraud & abuse, etc.	Coalitions
Evaluate how successful events/programs are in reaching target audience, how successful the event/program was, number of attendees, how to improve event, etc, and make improvements for the next event/program	County Health Districts Coalitions
Find VFC providers that have low AFIX immunization rates on young children. Target providers that fall below 75% and help them improve their rate	Nevada State Immunization Program County Health Districts
Encourage providers to privately purchase vaccines for their privately insured patients	Nevada State Immunization Program County Health Districts
Re-launch logo and use in all allowable materials	Nevada State Immunization Program County Health Districts Coalitions

Focus Area #3: Increase Reminder/Recalls

Focus Area 3 will focus on children 0 – 35 months of age.

Using immunization registries to conduct reminder/recalls is an effective method in increasing immunization rates for children and adults. According to the American Immunization Registry Association’s (AIRA) Modeling of Immunization Registry Operations Workgroup (MIROW), reminder/recalls can improve rates by 5 to 20 percent.

Nevada WebIZ trainers have been training providers on how to use the reminder/recall feature so that providers can learn how to improve their immunization rates. Additionally, a partnership was created in May 2010 between Nevada WebIZ and Pfizer to increase immunization rates for childhood pneumococcal. This effort has been successful especially for getting children caught up on the PCV13 booster dose. Furthermore, reminder/recall efforts have also been in effect at the county health district and coalitions levels (including Text4Baby).

Several new methods (along with the continuation of previous methods) must be developed to improve immunization rates at the provider level and state level in order to help improve childhood immunization rates.

See table below for strategies that were developed by the state and subgrantees.

Focus Area #3: Increase Reminder/Recalls	
Activity	Responsible Party
Determine which antigens to focus on within the 4:3:1:3:3:1:4 series per the NIS and Nevada WebIZ	Nevada State Immunization Program
Collaborate with pharmaceutical company(s) to conduct reminder/recalls on specific antigens	Nevada State Immunization Program
Encourage Shots 4 Tots providers to use the reminder/recall feature of Nevada WebIZ	Southern Nevada Health District
Encourage providers to continue their own reminder/recalls during AFIX visits and Nevada WebIZ trainings. When available, give providers postcards/stamps	Nevada State Immunization Program County Health Districts Coalitions
Distribute Text4Baby information in the PINK Packets	Coalitions
Continue to promote Text4Baby	Nevada State Immunization Program County Health Districts Coalitions
Conduct a “Call to Action” to providers on specific vaccines	Nevada State Immunization Program

Focus Area #4: Strengthen Collaboration with Partners

Focus Area 4 will focus on children 0 – 35 months of age.

Over the last several years, many partnerships have been created. The coalitions have grown exponentially, county health districts have been working more with community partners, and the NSIP has been working more with other state agencies. Even with these efforts, additional collaboration can be created with community partners, non-profits, state health programs, state agencies, etc. to help improve childhood immunization rates.

See table below for strategies that were developed by the state and subgrantees.

Focus Area #4: Strengthen Collaboration with Partners	
Activity	Responsible Party
Collaborate with the Nevada Association of the Education of the Young Child (NAEYC) and other coalitions, non-profits, corporate organizations	Coalitions
Collaborate with Child Care Centers <ul style="list-style-type: none"> • Increase AFIX visits & vaccination clinics • Partner with Nevada State Health Division’s Bureau of Health Care Quality & Compliance (HCQC) to improve immunization rates, create toolkit for HCQC • Provide VFC provider locations to parents 	Nevada State Immunization Program County Health Departments Coalitions
Collaborate with WIC <ul style="list-style-type: none"> • NSIP create partnership with State WIC due to common goals • Teach WIC clinics how to evaluate paper and Nevada WebIZ vaccination records • Provide VFC provider locations to parents • Create immunization clinics in WIC clinics • Provide WIC clinics with vaccination information for them to distribute parents 	Nevada State Immunization Program County Health Departments Coalitions
Collaborate with AAP/American Academy of Family Physicians (AAFP) <ul style="list-style-type: none"> • Partner with AAP/AAFP to send messages to their members via emails, mail, or newsletters • Increase immunization presence with AAP/AAFP • Collaborate with AAP/AAFP in “Call to Action” 	Nevada State Immunization Program Coalitions
Implement billing within all three health districts, coalitions, and all CHN offices for patients that are fully insured	Nevada State Immunization Program County Health Departments Coalitions

Focus Area #5: Increase Messaging

Focus Area 5 will focus on children 0 – 35 months of age.

Increasing vaccination messages is a vital component to educating parents, the general public, and even providers on the importance and safety of vaccines. It is also critical for parents to know where to take their children to be vaccinated. Without these media messages, less people will get the information they need.

Currently and in the past, there have been limited vaccination messages throughout Nevada. This is especially due to financial costs of developing and implementing media messages.

See table below for strategies that were developed by the state and subgrantees.

Focus Area #5: Increase Messaging	
Activity	Responsible Party
Implement Media Messages <ul style="list-style-type: none"> • Create new campaigns or use existing effective campaigns • Billboards, TV, social media, newspapers, website, newsletters 	Coalitions
Promote VFC Program to parents especially in pocket-of-need areas	Coalitions
Communicate vaccine safety to parents and providers	County Health Districts Coalitions
Debunk Autism link for parents and providers	County Health Districts Coalitions
Recruit Immunization Champion	Coalitions
Identify financial opportunities to implement media messages <ul style="list-style-type: none"> • Grant writing, corporate partners 	Coalitions
Increase influenza messaging	Coalitions
Re-launch logo and use in all allowable materials	Nevada State Immunization Program County Health Districts Coalitions

Focus Area #6: Increase Adolescent Immunization Rates

Focus Area 6 will focus on increasing adolescent immunization rates.

Per the National Immunization Survey (NIS), Nevada's adolescent rates have steadily been increasing. However, non-required school vaccinations such as HPV and MCV are much more difficult to improve. The only adolescent vaccination that is required for Nevada schools is Tdap. Tdap is required for entry into the 7th grade. Recruiting VFC providers, conducting AFIX visits, reminder/recalls, clinics, and increasing media messages are methods that can help increase adolescent immunization rates.

Below are Nevada's adolescent rates per the NIS.

2008 – 2011 Teen NIS 13-17 years of age					
				Females Only	
Year		≥ 1 dose Tdap	≥ 1 dose MCV4	≥ 1 dose HPV	≥ 3 doses HPV
2008	US	41%	42%	37%	18%
	Nevada	46%	30%	30%	NA
	Ranking	13 th	43 rd	37 th	
2009	US	56%	54%	44%	27%
	Nevada	64%	40%	39%	17%
	Ranking	11 th	41 st	37 th	47 th
2010	US	69%	63%	49%	32%
	Nevada	68%	54%	47%	26%
	Ranking	27 th	30 th	29 th	37 th
2011	US	78%	71%	53%	35%
	Nevada	80%	60%	55%	31%
	Ranking	25 th	37 th	22 nd	33 rd

Focus Area #6: Increase Adolescent Immunization Rates	
Activity	Responsible Party
Recruit and retain VFC Providers (pharmacies when possible, schools, family medicine, providers who have left the VFC Program, etc. especially in pockets-of-need locations)	Nevada State Immunization Program County Health Districts
Implement adolescent AFIX visits	Nevada State Immunization Program County Health Districts
Determine which adolescent vaccines to focus on per the NIS and Nevada WebIZ	Nevada State Immunization Program
Encourage providers to continue their own reminder/recalls during AFIX visits and Nevada WebIZ trainings. When available, give providers postcards/stamps	Nevada State Immunization Program County Health Districts Coalitions
Implement billing within all three health districts, coalitions, and all CHN offices for patients that are fully insured	Nevada State Immunization Program County Health Districts Coalitions
Collaborate with county school districts to implement Tdap and influenza clinics for adolescents	County Health Departments Coalitions
Increase influenza messaging	Coalitions
Re-launch logo and use in all allowable materials	Nevada State Immunization Program County Health Districts Coalitions

Focus Area #7: Increase Adult Immunization Rates

Focus Area 7 will focus on increasing adult immunization rates for influenza and Tdap.

The Nevada State Immunization Program mainly focuses on Tdap and influenza for adult vaccines. Nevada's Cocooning Project has been known as the national model for cocooning – the practice of immunizing close family contacts of a newborn against pertussis (even influenza). As of 2012, all 19 of Nevada's birthing hospitals and 30 OB/GYN providers are cocooning in one form or another. Some hospitals will vaccinate any close contacts, whereas other hospitals will only vaccinate the mother. It is believed that because of Nevada's strong cocooning program, a major rise in pertussis cases has not occurred in Nevada, whereas other states are facing significant outbreaks and epidemics.

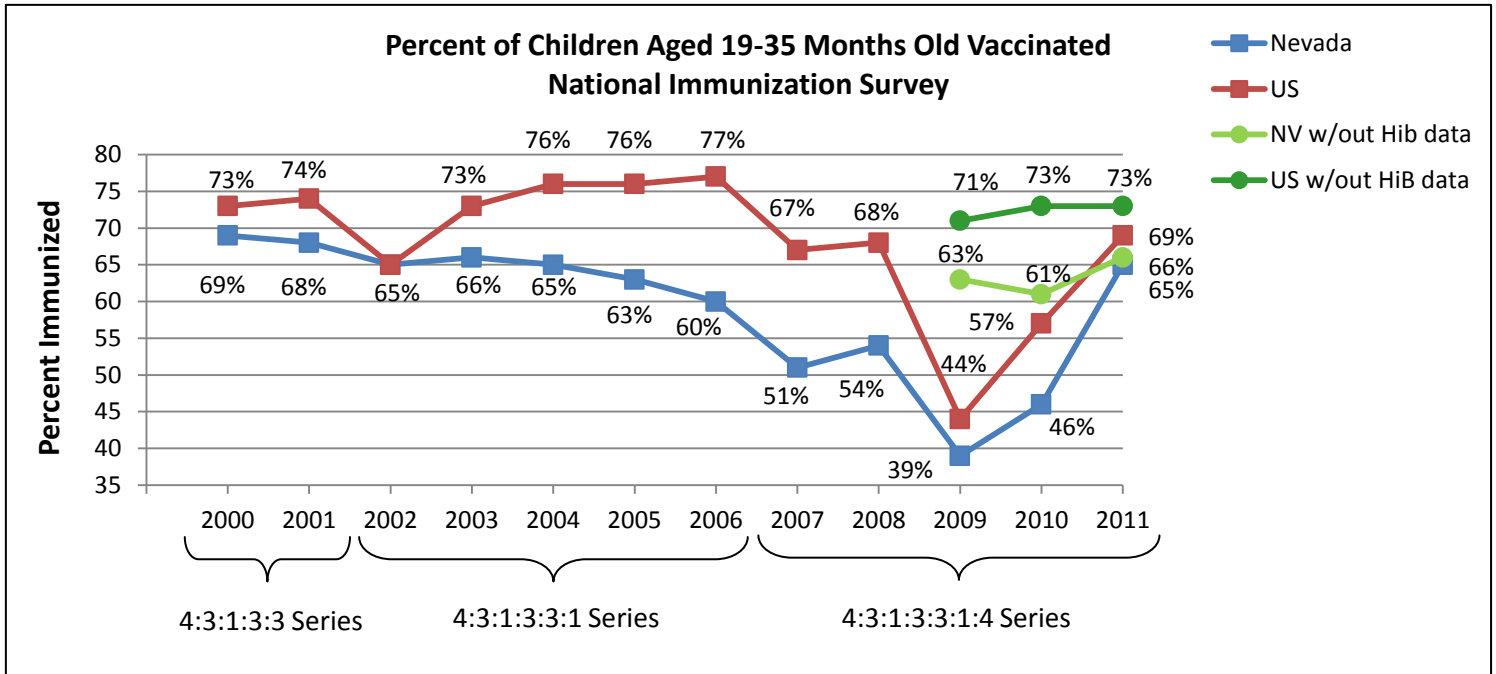
Point of Dispensing (POD's) exercises have been successful at vaccinating the public, especially adults, against influenza. The Nevada immunization coalitions have also used Pandemic Influenza funds to implement influenza media campaigns encouraging the public to get vaccinated.

Focus Area #7: Increase Adult Immunization Rates	
Activity	Responsible Party
Recruit and retain 317 providers	Nevada State Immunization Program County Health Departments
Educate birthing hospitals and OB/GYN's to implement and increase cocooning efforts for influenza and Tdap	Nevada State Immunization Program
Collaborate with state and county Public Health Preparedness Programs to conduct Point of Dispensing (POD) exercises	Nevada State Immunization Program County Health Departments Coalitions
Implement billing within all three health districts, coalitions, and all CHN offices for patients that are fully insured	Nevada State Immunization Program County Health Departments Coalitions
Increase influenza and Tdap media messaging	Coalitions
Re-launch logo and use in all allowable materials	Nevada State Immunization Program County Health Districts Coalitions

APPENDIX A

Immunization Rate Trends

Below are immunization rates per the National Immunization Survey (NIS) conducted by the CDC on an annual basis.



4:3:1:3:3:1:4
 4 doses of DTaP
 3 Polio
 1 MMR
 3 Hib
 3 Hepatitis B
 1 Varicella
 4 Pneumococcal

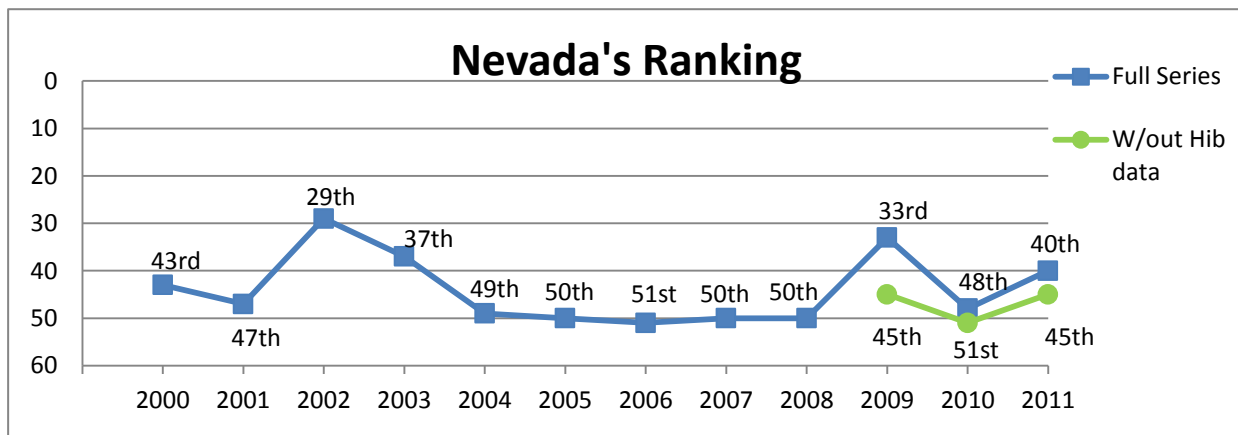
Hib Shortage
 2007 - 2009

2009
 Nevada became VFC Only

7/1/2009
 Nevada WebIZ law implemented for children

2010 to 2011 Series

- NV improved from 46% to 65% = 19% point improvement
- Rank improved from 48th to 40th



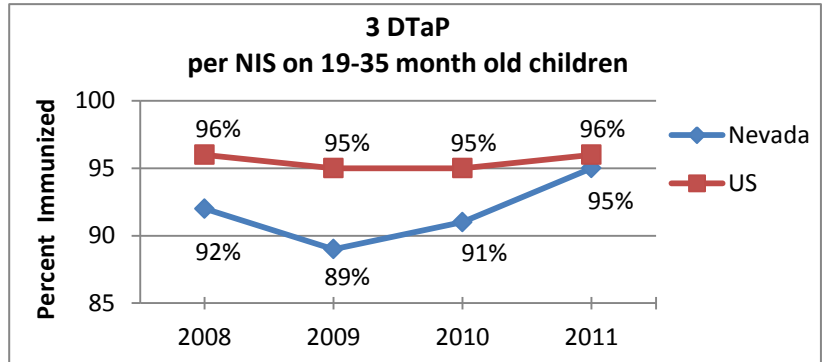
Why the **green** trend line? This line is to show readers how much the Hib shortage affected Nevada and the US. When Hib data is not included in the immunization rates, Nevada has much higher immunization rates, but also lower rank. As of 2011 NIS, both the green and blue trend lines are only 1% apart. This explains that the Hib shortage is no longer affecting Nevada and therefore full series data should be analyzed from 2011 on forward.

Single Antigens Per NIS

Yellow highlighted antigens are part of 4:3:1:3:3:1:4 per the National Immunization Survey (NIS).

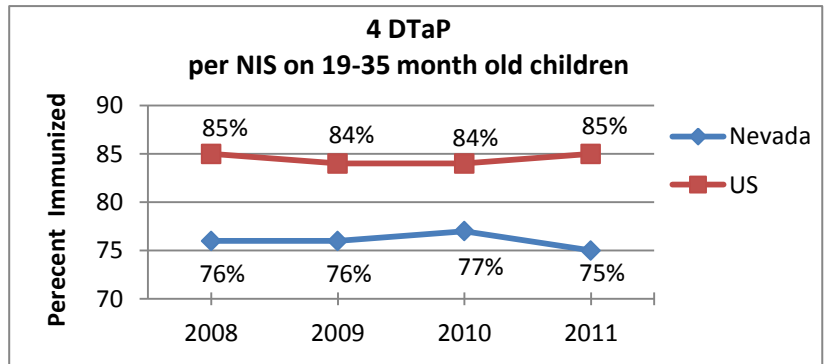
3 DTaP

	2008	2009	2010	2011
US	96%	95%	95%	96%
Nevada	92%	89%	91%	95%
Ranking	49 th	51 st	48 th	32 nd



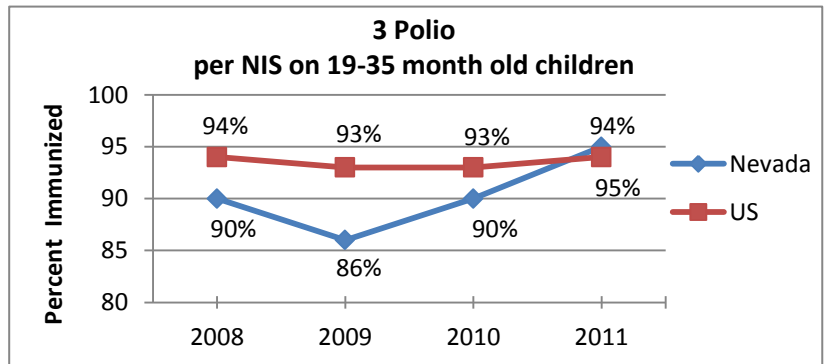
4 DTaP

	2008	2009	2010	2011
US	85%	84%	84%	85%
Nevada	76%	76%	77%	75%
Ranking	49 th	49 th	50 th	51 st



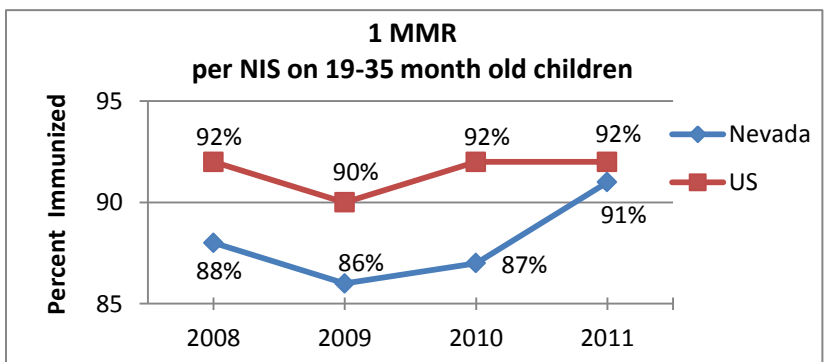
3 Polio

	2008	2009	2010	2011
US	94%	93%	93%	94%
Nevada	90%	86%	90%	95%
Ranking	45 th	51 st	47 th	17 th



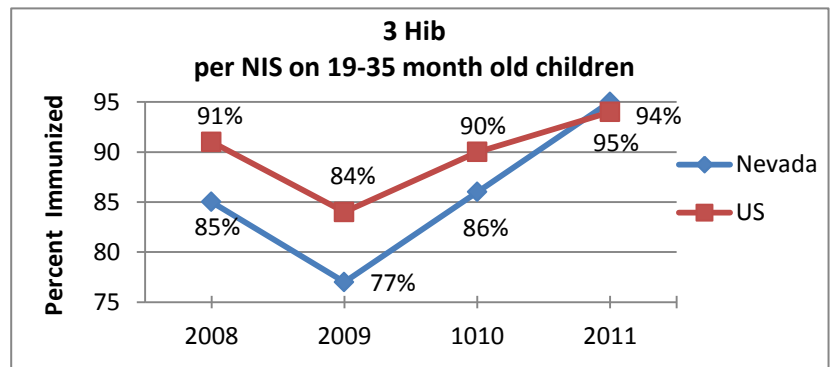
1 MMR

	2008	2009	2010	2011
US	92%	90%	92%	92%
Nevada	88%	86%	87%	91%
Ranking	48 th	47 th	48 th	35 th



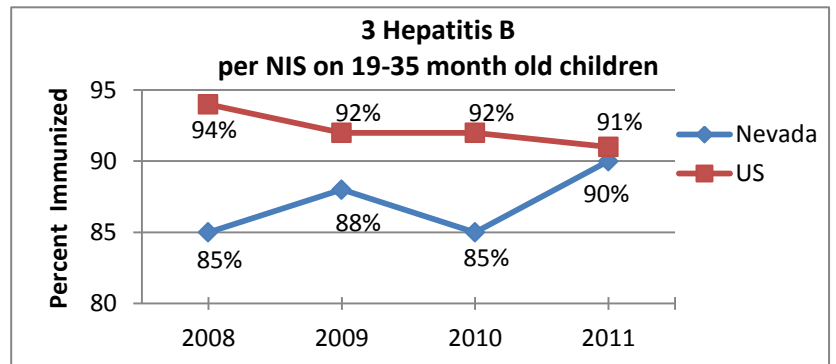
3 Hib

	2008	2009	2010	2011
US	91%	84%	90%	94%
Nevada	85%	77%	86%	95%
Ranking	43 rd	40 th	47 th	18 th



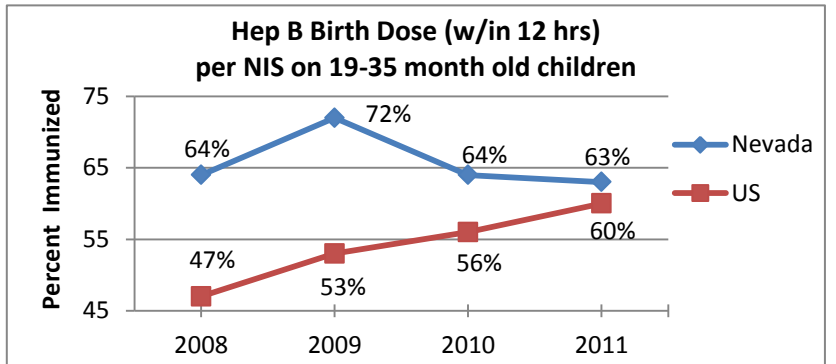
3 Hepatitis B

	2008	2009	2010	2011
US	94%	92%	92%	91%
Nevada	85%	88%	85%	90%
Ranking	51 st	50 th	51 st	36 th



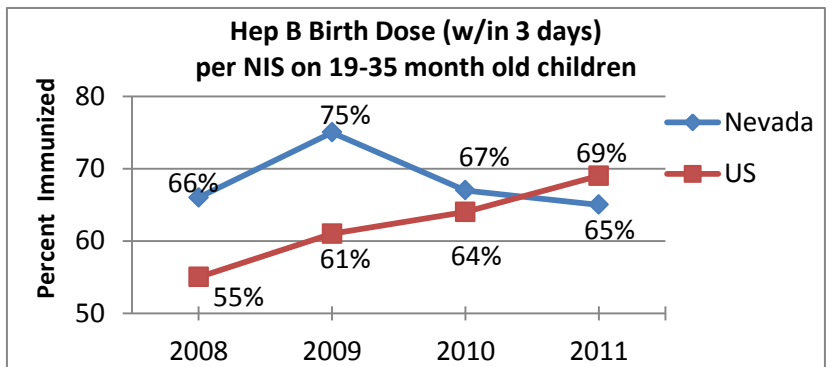
Hep B Birth Dose Within 12 Hours

	2008	2009	2010	2011
US	47%	53%	56%	60%
Nevada	64%	72%	64%	63%
Ranking	7 th	3 rd	13 th	25 th



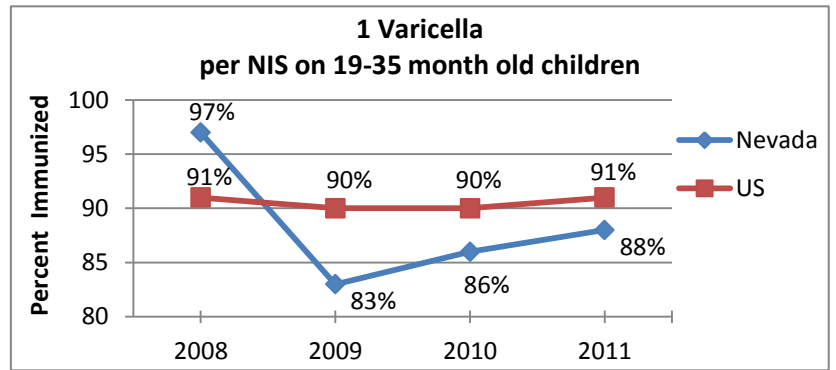
Hep B Birth Dose Within 3 Days

	2008	2009	2010	2011
US	55%	61%	64%	69%
Nevada	66%	75%	67%	65%
Ranking	22 nd	10 th	29 th	40 th



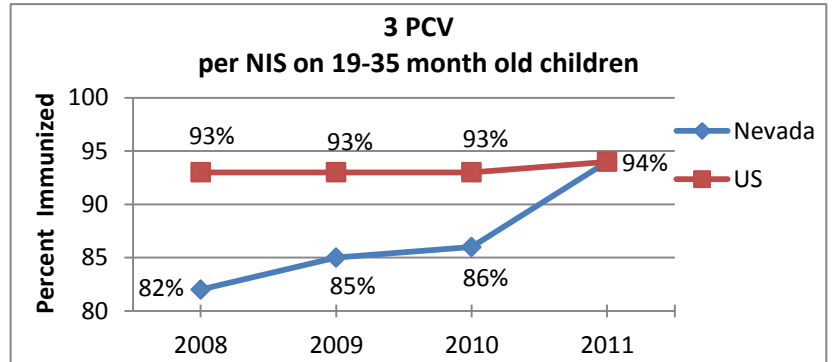
1 Varicella

	2008	2009	2010	2011
US	91%	90%	90%	91%
Nevada	97%	83%	86%	88%
Ranking	43 rd	47 th	46 th	34 th



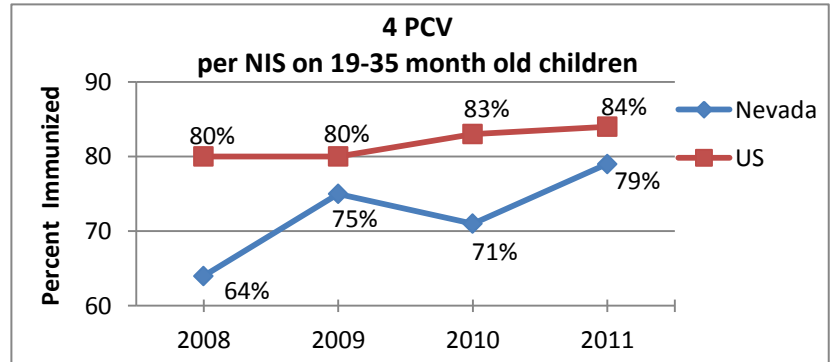
3 PCV

	2008	2009	2010	2011
US	93%	93%	93%	94%
Nevada	82%	85%	86%	94%
Ranking	51 st	51 st	50 th	17 th



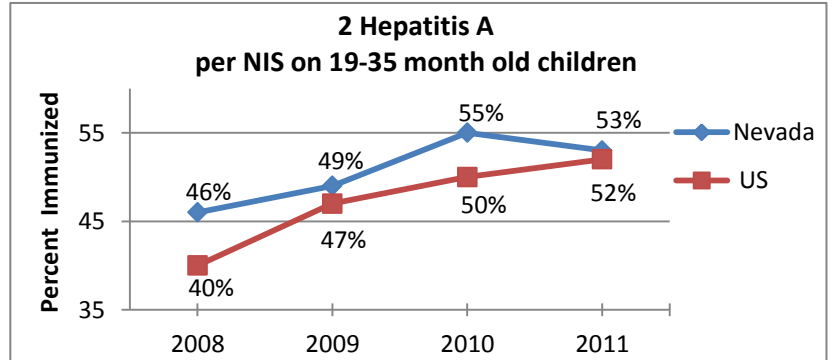
4 PCV

	2008	2009	2010	2011
US	80%	80%	83%	84%
Nevada	64%	75%	71%	79%
Ranking	51 st	44 th	51 st	45 th



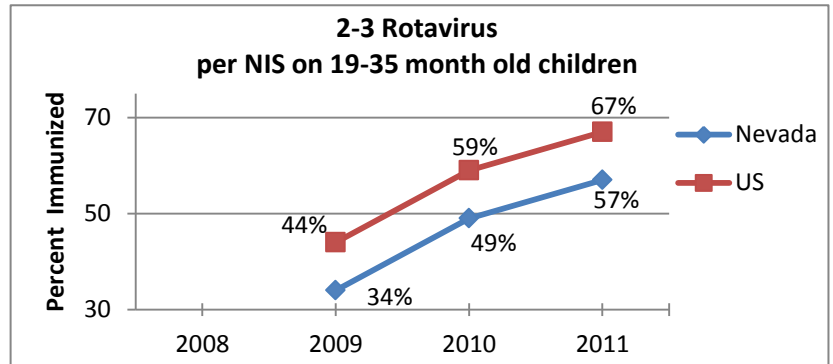
2 Hepatitis A

	2008	2009	2010	2011
US	40%	47%	50%	52%
Nevada	46%	49%	55%	53%
Ranking	12 th	20 th	12 th	22 nd



2 – 3 Rotavirus

	2008	2009	2010	2011
US	NA	44%	59%	67%
Nevada	NA	34%	49%	57%
Ranking	NA	44 th	45 th	46 th



APPENDIX B

Research

The tables below outline the research of each state conducted by Immunize Nevada, questions that were asked, and a summary of the different programs that each state offers.

State	Source	NIS Ranking (2010) 4:3:1:0:3:1:4	Insurance Coverage	Registry
Arizona	Jennifer Tinney Program Manager, The Arizona Partnership for Immunizations (TAPI)	Ranking: 31 Percentage: 71%	VFC; 317 for insured kids in public schools and deputization for health departments for underinsured at FQHC's and for private providers through rural health centers.	Arizona State Immunization Information System (ASIIS)
Colorado	Erin Suelmann-Noonan Executive Director, Colorado Children's Immunization Coalition (CCIC)	Ranking: 38 Percentage: 68.3%	VFC Select	Colorado Immunization Information System (CIIS)
New Mexico	Anna Pentler Executive Director, New Mexico Immunization Coalition	Ranking: 39 Percentage: 68.3%	Universal vaccine state. No screening required.	New Mexico Statewide Immunization Information System (NMSIIS)
Oregon	Karen Elliott Director, Oregon Partnership to Immunize (OPIC)	Ranking: 24 Percentage: 73.4%	VFC Select	Oregon Immunization ALERT (ALERT IIS)
Washington	Ginny Heller Immunization Action Coalition of Washington (IACW)	Ranking: 30 Percentage: 71.2%	Universal	Child Profile

Challenges by State:

State	Immunization Challenges
Arizona	<ul style="list-style-type: none"> - Transiency (both within the state to new communities and in and out of the state. - Many HMO's- As employers change, providers are not on the plans and continuity of care is lost. - Insurance barriers, including no insurance, underinsurance and co-pay expenses. - Economic and employment impact caused by the current recession.
Colorado	<ul style="list-style-type: none"> - Maintaining immunization funding for the state and local public health. - Getting information and resources about low-cost or free vaccines to underinsured and uninsured families. - Cost of vaccinations. - Parental concern about vaccine safety.
New Mexico	<ul style="list-style-type: none"> - Not finishing the recommended schedule. - Missed opportunities. - Provider issues (education, training, reimbursement). - Parent concerns.
Oregon	- N/A
Washington	<ul style="list-style-type: none"> - Access. - Lack of a medical home. - Parental safety concerns and hesitancy.

Outreach Programs:

State	Reminder Program	Outreach Campaigns
Arizona	Postcards through state registry and encouraging partnerships for providers and public health providers to work with vaccine manufacturers. They also create education opportunities for providers to learn how to utilize reminder programs to increase revenue streams and take ownership of their patients' health.	
Colorado	Local public health offices are encouraged to use reminder/recall programs through the CIIS. As of July 2011, 100% of local public health and community health clinics use CIIS and over 80% of pediatric offices use it.	<p>- Immunize for Good – Coalition, in partnership with the State Immunization Program, developed and launched online, parent-friendly source of information about vaccines. This campaign encourages parents to educate themselves about vaccinations and empowers parents to make the choice to immunize. www.ImmunizeForGood.com.</p> <p>- Shots for Tots & Teens Program – Program created in partnership with the coalition, Tri-County Health Department, County of Aurora Fire fighters, and three Rotary Clubs. This program has since spread to Denver County and the city of Littleton. Program offers low or no cost vaccine provided by the local health departments to children 18 years and under during monthly Saturday clinics.</p>
New Mexico	Individual providers use their own reminder programs. State provides postcards, but most providers use their own system. The coalition pays for postage and reminders done through the state registry.	Launched a “Done by One” campaign using the earliest opportunity to immunize (13-months). Believes that the 4 th DTaP shot was bringing down rates.
Oregon	The state registry has reminders, but physicians typically do their own. The coalition does not participate.	Does not have a large statewide campaign, however focuses on mini-campaigns including flu and Tdap to raise awareness in smaller “target” areas.
Washington	Individual providers use their own method and there is not a consistent statewide reminder program.	Currently are working on an awareness and education campaign called Vax Northwest – it has both a provider component as well as a grassroots component. The target is parents: www.vaxnorthwest.org .

Healthcare Provider Information:

State	Provider Barriers	Provider Education
Arizona	<ul style="list-style-type: none"> - Continuity of care because of transiency and insurance. - Reimbursement. 	Education is an important branch of coalitions outreach. 800 providers participated last year. Trainings are mandatory if providers receive a VFC probation notice as well as for new vaccine coordinators, etc.
Colorado	N/A	Coalition, independently and in partnership with the Vaccine Advisory Committee for Colorado, developed educational seminars and a webinar series to educate individuals involved in immunizations regarding all aspects of vaccination – from storage & handling to school requirements. Through educating providers they hope to decrease missed opportunities and get more children up-to-date.
New Mexico	- The fact that New Mexico is a Universal State is an issue.	CHILI training (Child Health and Immunization Learning Initiative) – covers immunization 101 and is conducted during the day hours. Shortened courses are available for those just wanting updates and CME's. Although not required, they strongly recommend CHILI trainings.
Oregon	- Reimbursement and education	Have been working very closely with physicians. Working on education programs, have IZ education program with CME's but not mandated. Challenge is reaching rural areas.
Washington	- Reimbursement and hesitancy	<ul style="list-style-type: none"> - The WA AAP Chapter is a key partner and is very involved and engaged in working on vaccination issues and rates in this state. More work is happening to engage the OB/GYN provider community. - A CME course is offered every year. In addition, they host a yearly event that brings in a national speaker. - A pocket-sized laminated vaccination schedule is distributed annually to 12,000 providers statewide.

APPENDIX C

Focus Groups & Online Survey



advertising, public relations
marketing, web & digital media

**Immunize Nevada
Final Report – Focus Groups, Online Survey
Recommendations from Focus Group and Survey Findings
May 1, 2012**

PARENT FOCUS GROUPS

Reno: 11 participants, including one pregnant woman. 2 male participants, 9 female.

Overriding theme:

Even though parents are choosing to have their children immunized they had almost universally a nagging doubt about if they are doing the right thing due to concerning information they receive through media, hear from celebrity anti-immunization spokespeople, read on the Internet user-generated sites and hear from friends and family. This information causes a nagging fear that they might be doing more harm than good for their child

What they said they want as a priority:

Statistical, unbiased information in which each immunization has information about the risks and the benefits (i.e. how many children had a negative side effect out of all vaccinated, and the risk of having the disease if no immunization), from a trusted source (not a pharmaceutical company, or from groups or entities that “have something to gain” by having them immunize their children).

Overview/content:

This group had a couple of “conspiracy theorist” members who felt that immunizations were a plot for doctors, pharm companies, insurance companies to scam consumers and make money.

This group also had a couple of people who insisted that “parents need to be accountable” no matter what income level, insured or not, whether or not someone forced the information into their hands. They felt that it was almost impossible to impact parents who fell into the “apathetic” group.

Where and how they said they’d gotten information on immunizations as parents:

- Their children’s doctors (pediatricians or family practitioners) – a variety of means, methods from the doctors’ offices
- Hospital at time of birth
- Classes at hospital (prenatals)
- Internet *
- Early Head Start
- Books

- Childcare providers
- Friends
- Nurse through “a state program”
- Text for Baby

*The group felt that the Internet was a great source of information, but that there was a lot of misleading, inaccurate information as well that parents might take as the truth and mislead them NOT to immunize their children.

Where and how they said they'd prefer to receive information, and where they think it would help non-compliant parents most:

- At hospital at time of birth – although they didn't know how much they could absorb at that time, it's when they are thinking about “next steps” for baby's health *
- At doctor's (pediatrician's) office – in person (explanation) and in writing at the start of the appointment or before the next appointment (their doctors were the source the group also noted as “most trusted”)
- Some suggested at OB/GYN offices in advance of birth of baby – get them while they are pregnant and thinking more about baby dos and don'ts
- Some suggested general public service announcements to point parents to information on immunizations, where to get them if you are uninsured, etc.
- Reminders preferred: text, mailers, email, Dr. office reminder calls, notices from children's school

* Pink packet: most didn't remember getting it; a few more did once it was passed out to look at. Many said they didn't get it at time of birth in hospital even once they saw it. When they saw it they felt like it may have been helpful. More of the Reno group actually kept the immunization log given at time of birth and kept it at home and tried to remember to take it to the doctor visit.

Reasons they felt contributed to Nevada's low immunization rate:

- Lack of money *
- Unemployment *
- Lack of insurance *
- Transportation issues to get to providers
- Non English speaking parents – not able to find or understand info
- New to area so don't know resources to use
- Apathy/don't care/can't deal with children's care
- Safety concerns about vaccines
- Not trusting doctors
- Lack of information about the diseases and if/how often kids are still getting them

*However, most of them thought that parents without insurance or funds were offered information on ways to tap into free or discounted immunizations, starting at the hospital and also via other sources. (The only segments that some parents “worried” about were non English speaking persons, especially those new to a community, and also those who are illegal and afraid of getting assistance for their children).

One parent mentioned that she was told her insurance “covered” immunizations at the time they purchased the insurance, but when it came time it was still \$800 out of pocket, which was very difficult

to come up with. (By the way - a doctor in Las Vegas group echoed this – that insurance companies say they cover them but then don't cover much of them, putting a hardship on some patients).

Things the group suggested as means to improve parents' getting their children immunized:

- Better access to an up-to-date record (possibly put the immunization records online so parents can login and see their child's records and some sort of schedule)
- Better presentation of materials – to be more “memorable” (one suggested “neon paper”), and also it was unanimous that they wanted valid, accurate relevant data and facts on immunizations (from a trusted source – doctors groups, government – i.e. Washoe District Health)
- Radio and TV PSAs - tell people where to get info
- Text 4 Baby (promote this more)
- My medical charts – centralized through EMR if possible
- More ways to get people to valid info online (Google search impact)
- Use other trusted sources such as District Health, church sources, OB-GYNs to get info to parents while the mom is pregnant

When asked specifically, the Reno group thought the immunization fair concept sounded like a good idea especially if there were people without firm relationship with providers, or for lower income people.

Las Vegas: 6 participants. 2 male, 4 female

Overriding theme and what they wanted:

Even though their pediatricians would be their preferred source of information, most felt they didn't get good explanation in their pediatricians' offices on the what, the why, and the side effects pertaining to the immunizations. Most wanted to get more info as opposed to just being told to take the immunizations (some reported a feeling of being told to “just do it”). They'd prefer a more patient and complete explanation, and a bit of flexibility if they didn't want to do all the immunizations at the same time as indicated by the schedule. They also want the information in writing to read in advance of the immunizations. They also want (like Reno group) some unbiased information of all the vaccinations, benefits and possible side effects, and when the child is supposed to get each (some grid or table with the same statistical information the Reno group wanted – the risks and benefits for each vaccine).

Where and how they said they'd gotten information on immunizations as parents:

- Told by daycare that children have to be immunized to get into daycare
- Children's physicians
- Research in books and online
- Very few got it at hospital at time of baby's birth (No pink packets specifically reported at UMC, St. Rose, Mt. Vista when we asked which hospitals they had children at). None of the Las Vegas group actually kept the immunization log given at time of birth; they counted on updated information from doctor's office at time of each immunization.
- Children's schools – get a sheet that tells us what shots are required
- Insurance company sends newsletters and reminders (HPN noted by name)

Where and how they said they'd prefer to receive information, where and how it would be most beneficial for non compliant parents:

- At hospital at time of birth – most didn't remember getting ANY information on immunization at that time and they thought it would be good. Have parents watch a DVD while still in hospital and sign something that they watched it (accountability again). Send-home information would be good to they felt.
- At doctor's (pediatrician's) office – in person (explanation) and in writing at the start of the appointment or before the next appointment
- At or via pre-schools/childcare and schools. They knew immunizations were required in order to be admitted to school and they felt that this location would be a good place, as parents are talking to staff, that education could occur. (One suggested immunization "days" at schools to take care of a lot of kids at one time instead of the "immunization fairs.")
- To reach parents without insurance or funds, put information at WIC offices, Health District offices; anywhere there are other free or inexpensive services these parents would be seeking.
- Reminders: text, mailers, phone calls from doctors' office, email
- One had a good suggestion: a way to call a number, or go online, enter a child's ID number or Medicaid number, and get an immediate read out of where the child is in terms of immunizations and what and when the next ones would be. (Which is what the WebIZ public portal will be once launched.) The Reno group echoed this suggestion.
- They were very suspicious of any information that had a pharmaceutical company's name on it.

Reasons they felt contributed to Nevada's low immunization rate:

- Different culture, customs and language barriers
- Transportation
- Access (lack of money, inability to find place to get immunizations, lack of knowledge of the available resources)
- Religious beliefs
- Parents too busy
- Fear – concern about safety and side effects
- Not knowing about free immunization program
- Hours of operation – not open when parents aren't working
- Lazy parents
- Illegal parents/no papers (afraid of getting caught if they bring in their child for care)

Things the group suggested as means to improve Nevada's infant immunization rate:

- This group suggested both penalties for parents who don't comply (financial) and incentives for parents who do stay on schedule (one reported a Medicaid offer – giving a new stroller if a parent stayed on schedule for first year). They disagreed about which would be better. However, some felt that penalties would violate people's rights by forcing them to do something they didn't believe in, perhaps culturally or religiously.
- Train hospital staffs better so that education can occur at time of baby's birth before discharge
- Authorities who can mediate/understand different cultures
- More education for parents – some felt some scare tactics (if done well) might help move parents to action*
- Offer vaccinations AT preschools and schools
- They wanted clear, unbiased, factual information on the real risk of the vaccines vs. the illnesses that they were meant to prevent*

- Some members wanted the ability to do different vaccination schedules than what the doctors ordered and thought it might help convince parents to agree to more
- Target the moms more than the dads (the two men agreed that they tend to be more oblivious to info provided)

*Messaging – the women thought that messaging that was a bit “eye opening” about the risks of not vaccinating might be a good approach if it wasn’t over the top scare tactic wise. The men didn’t think that it would resonate as well. Almost all really wanted balanced, non-biased information about the pros and cons, risks and benefits, side effect potential, etc. They agreed that when they heard about an incident of communicable disease that can be immunized against, that they thought more seriously about immunizing.

When asked specifically, the Las Vegas group didn’t like the immunization fair concept because it sounded like gimmick; something for fun rather than a time to educate the parents.

Summary of Parent Online Survey:

34 responded: 26 were parent or primary caregiver, 5 were expecting a baby and 5 were “other.”

- By far the primary source of information on immunizations reported was from doctors or their office staff. Distant second was the Internet. No one reported getting it at the hospital when the baby was born.
- Respondents would prefer by far to get information from their doctor or office staff when they have appointments for their children; then secondarily, about equal was a preference to have information provided at hospital when the baby is born, and reminder postcards mailed to them. Email was also mentioned as a preferred choice.
- Most respondents agreed or strongly agreed that it’s easy to find information about immunizations, where to get them, etc.
- Most respondents disagreed or strongly disagreed that immunizations are too expensive.
- Most respondents agreed or strongly agreed that Nevada parents who couldn’t afford immunizations have options where they can get them at no or low cost, but they also felt that parents with insurance can get them more easily than parents without insurance.
- Overwhelmingly respondents (69%) strongly agree that immunizations are vital to keeping children healthy and safe, with 4 respondents (13.8%) strongly disagreeing.
- In response to the statement “I believe children will grow up healthy even if they don’t get immunizations” – there is an interesting split: Over 60% strongly disagreed or disagreed, but 27.6% were neutral. Nearly 21% agreed or strongly agreed.
- Most respondents weren’t sure if it is more difficult to get immunizations for children in rural communities.
- When asked about the primary reason parents don’t get immunizations, nearly 40% indicated “They feel they can’t afford them and don’t know where to get free or low cost” – and 25% indicated that they feel it’s because parents feel they may be dangerous.
- When asked what tools our changes might help more parents get their children immunized, by far the biggest response for importance was “more information on the safety and health benefits of immunizing young children.” Then in second place there was a tie between “more clinics and doctors’ offices offering free or low cost immunizations” and “more information provided directly to parents reminding them what immunizations to get and when.”

PROVIDER FOCUS GROUPS:

Reno: 11 participants, including 3 physicians, 6 nurses and 2 medical assistants.

Overriding theme:

The doctors and providers in the group were overall pretty loyal and knowledgeable users of WebIZ, and communicate that they use it well to help communicate and advise clients. They were frustrated by their patients who refuse to immunize based upon what they perceive as accurate information. The patients who pick and choose what immunizations they think are necessary really frustrate them. Most try time after time to get patients to agree to any immunizations they can get them to take.

What they said they want:

Help with convincing patients not to be so frightened and believe that they have the information they need to make their own decisions. Help with dealing with insurance companies and other payors for their patients.

Their other issues (overview):

The time it takes to convince parents to take an immunization, overcome their misperceptions (they can only bill for a patient vaccination consult if they actually do the vaccination); lack of reimbursement for immunizations; they like the reminder cards and other tools supplied by WebIZ and pharmaceutical companies but if they are a small practice they don't have time to use them; one pediatrician had a practice of kids who had a lot of medical issues so he was very adamant about not accepting parents who do not vaccinate because unvaccinated kids jeopardize the health of kids with compromised health who are in his waiting room.

Reasons provided when asked why immunization rates were so low in Nevada:

- Education level of patients
- They felt that, contrary to beliefs, Hispanic patients were actually quite compliant.
- High uninsured population, lack of insurance for immunizations
- Misperceptions about safety of immunizations, selective knowledge and acceptance of immunizations, paranoia about vaccines the relationship between vaccine and pharma companies
- Related topic – they are uninformed and go to websites that give opinions only, not facts
- The growing practice of parents picking and choosing what vaccines they think their child should get as opposed to what physicians advise
- They have the expectation that their kids will NOT die of these diseases (the “It can’t happen to me mentality”)
- Religious beliefs (which the group felt was probably bogus and a handy excuse)
- A focus on personal freedom gives parents too much freedom to choose vaccinations
- Parents telling kids that they will get a shot as part of a discipline approach
- Providers have less time to spend developing relationships and trust with patients
- Providers can only bill for the consult if they end up giving the vaccine, so time spent educating isn't billable if no immunization results.
- A lot of the handouts they have to use, don't “work” with parents (not believed or paid attention to)
- Mobile population who moves, can't remind them; corporate medicine or no set physician for kids (they see different doctors so no relationship develops)

Their suggestions on how to help parents “believe” in need for immunizations:

- Fear/reality, show “Contagion”, show end results visually
- Stats – tell patients the reality of risk for immunizations vs. the diseases; non-biased, evidence based statistics
- Specific stories, examples
- For Hispanic market, even though more compliant, be sure to tell them the ‘why’
- Continue to develop that relationship, interactions where vaccinations are part of the conversation
- Medical home model – if implemented well, should help patients with trust and relationships with providers
- PSAs – education. Make it real. They suggested TV and radio since it seems to be seen and trusted more by parents.
- Reach the pediatricians to influence/engage them through the Academies.
- Don’t give options with some vaccines and explain why
- Education through the schools to parents since schools are required to communicate the need for kids to get immunizations.

Their recommendation on how to address some of the big issues with non-compliant parents or providers:

1. Helping patients follow the ACIP schedule:
 - Use WebIZ, put CDC guide on wall, or use other good info from trusted sources
2. Reviewing immunization record with every visit:
 - WebIZ, print it out when appt is made and provide when checked in
3. Purchasing vaccine
 - VFC program is fantastic but private doctor purchasing vaccine is costly; have to buy enough and if it expires doctors have to eat the costs; can the state help – give them terms on time maybe?
4. Participating in state registry:
 - It would help if WebIZ and EMR would integrate. (WebIZ has come a long way but it would be great if it could interface and not require duplication of efforts – this also came up with Vegas group of providers).

Las Vegas: 4 participants, including 3 physicians and 1 nurse practitioner.

Overriding theme and what they wanted:

Just as in Reno, they were frustrated by their patients who refuse to immunize based upon what they perceive as accurate information (they pointed to mostly middle class, more educated patients who think they know what’s correct). Most of them try time after time to get patients to agree to any immunizations they can get them to take. They were longing for consistent information provided by someone so that all providers handed out the same, valid, balanced information so that patients can’t pick and choose providers based upon what they hand out or say. This group additionally had greater frustration with the payors who have differential reimbursement depending on payor group (I.e. Medicaid doesn’t reimburse for combo vaccines).

What they said they want:

Change payor reimbursement practices which discourage parents from agreeing to immunizations (i.e. payor differences – won’t pay for combo vaccines), develop factual realistic Nevada-based information to give to parents that is consistent across all channels that it’s provided through; force doctors to give

this consistent information and not “cop out” because it’s easier to be politically correct, or to not spend the time they need to with parents and can’t get reimbursed for.

Reasons provided when asked why immunization rates were so low in Nevada:

- Safety concerns
- Middle class parents believe they know better based on their “research” on the web. It’s false (the autism scare, false research) but causes them to reject doctors’ advice
- Hispanic patients are more compliant, grateful for information and time from doctor
- Physicians lacking the time to sit down and give a thorough explanation and develop trust in patients/parents
- Buying the vaccine is expensive and many doctors are getting a “take it or leave it” pricing structure
- A lot of payors won’t reimburse doctors for combination vaccines so patients have to have multiples
- Insurance won’t pay for the consultation without the vaccination, and what is reimbursed is sometimes less than the cost of the vaccine
- Parents think they have full coverage and then don’t and can’t afford the vaccines
- Some physicians are seeing patients selectively - only the ones that comply with their philosophies, and patients are selecting physicians based on their philosophies (too tough, easy enough) on vaccinations

Their suggestions on how to help parents “believe” in need for immunizations:

- Make info provided by all healthcare workers consistent on the issue – they were frustrated that depending on which doctor or clinic a parent went to they could get info that wasn’t consistent, so doctors who were more insistent on immunizations could be “negated” by doctors passing out info that was more lenient on need for immunizations
- Put immunization message out correctly in media and try to get and show unity within pediatricians
- Show stories on what can really happen
- Share actual statistics on/for kids in Nevada
- Talk about global travel, potential for visitors to bring diseases to our cities
- Get media to work with us, not against us
- Break the concept of “it can’t happen to my child, only their child” (it can happen to you/break herd mentality)

Their recommendation on how to address some of the big issues:

1. and 2. Helping patients follow the ACIP schedule and reviewing immunization record with every visit:

- Find good information to use and share, consistent across all physicians’ offices. Try to find time to get report and info printed out soon enough and give to parents to use.

3. Purchasing vaccine

- Is there any way to get discounts with government help? Even with discount it still costs them a lot of money for their practice. Very difficult to have patients see other patients get combo shots with insurance, vs. Medicaid that doesn’t allow.

4. Why doctors aren't using WebIZ/state registry:

- Hard to find the time to enter data – by MAs or anyone, in a timely manner and also accurately, which is important
- Reimbursement for time is low, and so no time to do things that are not so critical; they'd have to employ another person to do that job and they can't afford it
- Can there be an incentive to use WebIZ – some kind of recognition that you are a good user – for patients to see and let them know you are a “good doctor”
- You have to enter data in EMR and also WebIZ, which duplicates effort and costs time and money that the practices' can't afford
- Initial set up time for WebIZ
- Don't have flow of data both ways to have to check our records and WebIZ too
- Can you review it and see quickly what needs to be added – make it more simple and practical

Summary of Provider Online Survey:

27 responded: 10 were nurses, 5 were physicians, 9 were medical assistants and 3 were “other.” 96% were female.

- When asked why they thought Nevada ranks low in childhood immunizations (they were asked to choose up to 3 answer) by far the most respondents marked “Nevada has a more transient population so it's hard to keep track of parents and remind them.” Ranked as a tie for second was “higher population of uninsured and underinsured” and “currently no effective, consistent means of communicating with and reminding parents...”
- When asked why providers have difficulty getting parents to bring in their children, over 78% said that “some segments of the population don't make or keep appointments,” and 57% said “it's hard to convince some parents about the safety and health benefits of immunizations.”
- When asked what would be most helpful to improve the immunization percentage, more than 78% said “More general public awareness to Nevada's population as a whole, educating parents about the safety and health benefits of childhood immunizations.” (This mirrored the respondents in the parent online survey).
- Nearly 60% agreed that it's easy for parents to find information about immunizations, where to get them, etc., but 30% disagreed.
- Respondents were evenly split between agreeing and disagreeing that Nevada parents who couldn't afford immunizations have options where they can get them at no or low cost.
- They were also evenly split over the statement that “it's easier for parents with insurance to get immunizations more easily than parents without insurance.”
- Most respondents agreed or strongly agreed that it is more difficult to get immunizations for children in rural communities.

Recommendations Based Upon Parent Research:

1. Consider focusing on developing some type of factual, consistent information for all distribution points in Nevada, in conjunction with government as well as pediatricians and family practitioners. This would be THE consistent information provided via all channels. (Echoes something the doctors said as well – they want information to give out that is Nevada-specific to disease incidence here and nearby, and that is consistent across all doctors’ offices, payors, schools, and other distribution points so that parents can’t pick and choose what they want to receive and accept based on which doctor they choose or vice versa.) They agreed that their doctors were their most trusted source of information, but had differing views of how well the information was provided to them verbally and in writing. Can we work to make consistent information provision by doctors a part of WebIZ state registry requirements?
2. It appears that the Pink Packets are not given out consistently by hospitals, and/or not remembered or used as intended in most cases. It appears that when they are distributed they are sometimes used as a vehicle for other information that the hospital chooses to insert. We’d suggest looking to provide some other type of tool, that satisfies the desire of parents stated in 1., above, and which is less expensive, but is still memorable and “keep worthy.”
3. They suggested and/or liked the idea that is essentially going to be the public portal on the WebIZ site, where parents can go online, and using their child’s WebIZ number, see how current they are. This would be a good topic for a public information campaign once launched.
4. Most parents thought that providing information during pregnancy was the best idea, since at that stage they had months to review and think about it. Less stressful time than after child’s birth, in the hospital or at time of pediatrician’s visit. Explore a program of information provided via OB-GYN offices (any way to make it mandatory to offer the immunization information described in 1.?)
5. Those who got text4baby, and/or calls from doctors’ offices (WebIZ prompted) really appreciated them in terms of reminders to take the next step. Continue to heavily promote text4baby. (Parents liked the idea of information received by texts.)
6. Almost all parents had that nagging feeling they may not be doing the right thing for their children when getting them immunized due to the fear factor. They felt better if someone they trusted assured them they were doing the right thing. If they didn’t get quality time with their doctor, they didn’t feel as good about it. Possibly offer a supplemental immunization info line where during certain hours of operation a health professional can answer questions about immunizations. It could also be a great recruitment tool for text4baby since they could be asked for their phone number on the call. You had thought about an immunization specialist at hospitals but this could be an easier to implement alternative.
7. Most suggested providing information about free or inexpensive immunizations for lower income parents very aggressively where other “free services” were provided – i.e. WIC, Health District offices, Medicaid, etc.

Recommendations Based upon Provider Research:

1. Consider focusing on developing some type of factual, consistent information that is developed for all distribution points in Nevada, in conjunction with government, as well as pediatricians and family practitioners. This would be THE consistent information provided via all channels. Can we work to make consistent information provision by doctors, a part of WebIZ state registry requirements?
2. Is there anything that can be done to change payor practices of reimbursement differentials on immunizations? Especially government?
3. Is there anything that can be done to affect the price at which physicians purchase vaccines, especially for government programs, at least to get better terms?
4. Support physicians in their attempts to inform and persuade parents by providing educational campaigns to overcome parents' misperceptions that they know best about immunizations, that selectively choosing which/when vaccines are given and/or that something bad can't happen to their child.
5. See if WebIZ can work toward developing interfaces with common EMRs used by physicians.