

**NEVADA STATE BOARD OF
PHARMACY**

**IMMUNIZATION
REPORT**

April 1, 2015 – March 31, 2016

**NEVADA STATE BOARD OF PHARMACY
431 WEST PLUMB LANE
RENO, NEVADA 89509
(775) 850-1440
FAX: (775) 850-1444
WEBSITE: <http://bop.nv.gov/>
E-MAIL: pharmacy@pharmacy.nv.gov**

INTRODUCTION

A copy of this report is available from the Board of Pharmacy on request.

This report, mandated by Nevada Revised Statute (NRS) 639.065, will look at Nevada's immunization levels compared to national levels and review current administrative code changes to improve the health of the people of Nevada by improving access to pharmacists who provide immunizations and by expanding the role of pharmacists in administering immunizations under physician protocol.

NRS 639.065 Annual report concerning immunizations administered by pharmacists.

The Board shall prepare an annual report concerning immunizations administered by pharmacists that includes, without limitation, the number of immunizations which were administered by pharmacists during the previous year, any problems or complaints reported to the Board concerning immunizations administered by pharmacists, and any other information that the Board determines would be useful in determining whether pharmacists should continue to administer immunizations in the State. The report must be available for public inspection during regular business hours at the office of the Board. (Added to NRS by 1999, 2722)

Nevada remains one of the least immunized states in the nation. In the interest of better serving the people of Nevada, NRS 454.213 (18) regulated through the Nevada State Board of Pharmacy, authorizes pharmacists with the proper training to administer vaccinations to patients.

NRS 454.213 addresses a pharmacist's authority to possess and administer dangerous drugs. [Effective January 1, 2008.]

18. In accordance with applicable regulations of the Board, a registered pharmacist who:
 - (a) Is trained in and certified to carry out standards and practices for immunization programs;
 - (b) Is authorized to administer immunizations pursuant to written protocols from a physician; and
 - (c) Administers immunizations in compliance with the "Standards of Immunization Practices" recommended and approved by the United States Public Health Service Advisory Committee on Immunization Practices.

THE STATE OF IMMUNIZATIONS IN THE STATE OF NEVADA

Estimated Vaccination Coverage *† with Individual Vaccines and Selected Vaccination Series Among Children Aged 19-35 Months§ by State and Selected Area – National Immunization Survey (NIS), United States, 2014

	3+HepB	3+Hib	Hib-PS¶	Hib-FS**	HepB Birth dose††	1+Var§§
US	92.6±0.8	93.3±0.8	82.0±1.3	91.6±0.9	72.4±1.5	91.0±0.9
Nevada	89.7±4.2	91.6±3.9	78.8±5.9	89.5±4.5	75.5±6.4	89.7±4.3
	3+PCV	4+PCV	1+HepA	2+HepA	Rotavirus¶¶	Combined 3-vaccine series***
US	92.6±0.8	82.9±1.3	85.1±1.1	57.5±1.6	71.7±1.6	82.6±1.2
Nevada	90.6±4.0	78.8±5.8	85.5±5.1	57.9±7.1	62.0±7.3	78.6±6.1
	Combined 4-vaccine series†††	Combined 5-vaccine series§§§	Combined 6-vaccine series¶¶¶	Combined 7-vaccine series****		
US	77.7±1.3	75.7±1.4	74.6±1.4	71.6±1.5		
Nevada	73.6±6.4	71.4±6.6	71.4±6.6	67.7±6.6		

Abbreviations: DTaP = diphtheria, tetanus toxoids, and acellular pertussis vaccine (includes children who might have been vaccinated with diphtheria and tetanus toxoids vaccine, or diphtheria, tetanus toxoids, and pertussis vaccine); Polio = poliovirus vaccine; MMR = measles, mumps, and rubella vaccine; Hib = *Haemophilus influenzae* type b vaccine; HepB = hepatitis B vaccine; Var = varicella vaccine; PCV = pneumococcal conjugate vaccine; HepA = hepatitis A vaccine.

* Estimate presented as point estimate (%) ± 95% confidence interval (CI). Estimate=NA (Not Available) if the unweighted sample size for the denominator was <30 or (CI half width)/Estimate > 0.588.

† Estimates with confidence intervals >20 may not be reliable.

§ Children in the 2014 NIS were born January 2011 through May 2013.

¶ Primary series of Hib (≥2 or ≥3 doses, depending on product type).

** Full series of Hib (≥3 or ≥4 doses, depending on product type).

†† HepB administered from birth through age 3 days.

§§ ≥1 dose of Var on or after child's first birthday, unadjusted for history of varicella disease (by parent/guardian report or provider records).

¶¶ Rotavirus vaccine includes ≥2 or ≥3 doses, depending on the product type received (≥2 doses for Rotarix [RVI] or ≥3 doses for RotaTeq [RV5]).

*** The combined 3-vaccine series (4:3:1) includes ≥4 doses of DTaP, ≥3 doses of Polio, and ≥1 dose of measles-containing vaccine.

††† The combined 4-vaccine series (4:3:1:3*) includes ≥4 doses of DTaP, ≥3 doses of Polio,

≥1 dose of measles-containing vaccine, and Hib full series. (In 2013 data, referred to as 4:3:1:4-FS)

§§§ The combined 5-vaccine series (4:3:1:3*:3) includes ≥4 doses of DTaP, ≥3 doses of Polio, ≥1 dose of measles-containing vaccine, Hib full series, and ≥3 HepB. (In 2013 data, referred to as 4:3:1:4:3-FS)

¶¶¶ The combined 6-vaccine series (4:3:1:3*:3:1) includes ≥4 doses of DTaP, ≥3 doses of Polio, ≥1 dose of measles-containing vaccine, Hib full series, ≥3 HepB, and ≥1 Var. (In 2013 data, referred to as 4:3:1:4:3:1-FS)

**** The combined 7-vaccine series (4:3:1:3*:3:1:4) includes ≥4 doses of DTaP, ≥3 doses of Polio, ≥1 dose of measles-containing vaccine, Hib full series, ≥3 HepB, ≥1 Var, and ≥4 PCV. (In 2013 data, referred to as 4:3:1:4:3:1:4-FS)

Vaccination Coverage Estimates

CDC Immunization Managers Home Vaccination Coverage Estimates National Immunization Survey (NIS) NIS Table Data for 2014

Overall/Difference/Age/WIC and Poverty Status Urbanicity/Race/Ethnicity/Facility/Demographics

Overall	Coverage with Individual Vaccines and Vaccination Series
Excel file	by State and Local area (includes birth dose of HepB and 2+doses Hep A)
PDF file	
Excel file	by State (includes birth dose of HepB and 2+doses Hep A)
PDF file	
	Difference Between (Q1/2014-Q4/2014) - (Q1/2013-Q4/2013) Year's Estimates
Excel file PDF file	Difference in estimated coverage levels over one year period
Age	Coverage Levels by Milestone Ages
Excel file	Birth dose of HepB only, by State and Local Area
PDF file	
Excel file	3 months by State and Local Area
PDF file	
Excel file	5 months by State and Local Area
PDF file	
Excel file	7 months by State and Local Area
PDF file	
Excel file	13 months by State and Local Area
PDF file	
Excel file	19 months by State and Local Area
PDF file	
Excel file	24 months by State and Local Area
PDF file	

WIC and Poverty Status Coverage Levels with Individual Vaccines & Selected Vaccination Series by Participation in WIC & Poverty Status

[Excel file](#)

[PDF file](#)

Participating in WIC by State and Local Area

[Excel file](#)

[PDF file](#)

Not Participating in WIC by State and Local Area

[Excel file](#)

[PDF file](#)

Living at or Above Poverty by State and Local Area

[Excel file](#)

[PDF file](#)

Living Below Poverty by State and Local Area

Urbanicity Vaccination Coverage Levels by Urbanicity

[Excel file](#)

[PDF file](#)

Living in a MSA Central City by State and Local Area

[Excel file](#)

[PDF file](#)

Living in a MSA Non Central City by State and Local Area

[Excel file](#)

[PDF file](#)

Living in a Non MSA Central City by State and Local Area

Race/ethnicity Vaccine - Specific Coverage Levels by Race/Ethnicity and Poverty Level

[Excel file](#)

[PDF file](#)

3+DTaP by State and Local Area

[Excel file](#)

[PDF file](#)

4+DTaP by State and Local Area

[Excel file](#)

[PDF file](#)

3+Polio by State and Local Area

[Excel file](#)

[PDF file](#)

1+MMR by State and Local Area

[Excel file](#)

[PDF file](#)

Full Series Hib by State and Local Area

[Excel file](#)

[PDF file](#)

3+HepB by State and Local Area

[Excel file](#)

[PDF file](#)

Hep B Birth Dose by State and Local Area

[Excel file](#)

[PDF file](#)

1+Varicella by State and Local Area

[Excel file](#)

[PDF file](#)

3+PCV by State and Local Area

[Excel file](#)

[PDF file](#)

4+PCV by State and Local Area

[Excel file](#)

[PDF file](#)

2+HepA by State and Local Area

[Excel file](#)

[PDF file](#)

Rotavirus by State and Local Area

Excel file PDF file	3-Vaccine Series (4:3:1) by State and Local Area
Excel file PDF file	4-Vaccine Series (4:3:1:3*) by State and Local Area
Excel file PDF file	6-Vaccine Series (4:3:1:3*:3:1) by State and Local Area
Excel file PDF file	7-Vaccine Series (4:3:1:3*:3:1:4) by State and Local Area
Excel file PDF file	National Coverage by Race/Ethnicity
Excel file PDF file	National Coverage by Poverty Level and Race/Ethnicity

Facility and VFC Coverage by Provider Characteristics (Facility Type and VFC participation)

Excel file PDF file	National Coverage by Provider Facility Type
Excel file PDF file	3+DTaP by Provider Facility Type
Excel file PDF file	4+DTaP by Provider Facility Type
Excel file PDF file	3+Polio by Provider Facility Type
Excel file PDF file	1+MMR by Provider Facility Type
Excel file PDF file	Hib-PS by Provider Facility Type
Excel file PDF file	Hib-FS by Provider Facility Type
Excel file PDF file	HepB by Provider Facility Type
Excel file PDF file	Hep B Birth dose by Provider Facility Type
Excel file PDF file	1+Varicella by Provider Facility Type
Excel file PDF file	3+PCV by Provider Facility Type
Excel file PDF file	4+PCV by Provider Facility Type
Excel file PDF file	1+HepA by Provider Facility Type
Excel file PDF file	2+HepA by Provider Facility Type
Excel file PDF file	Rotavirus by Provider Facility Type
Excel file	4:3:1 by Provider Facility Type

[PDF file](#)

[Excel file](#)

4:3:1:3* by Provider Facility Type

[PDF file](#)

[Excel file](#)

4:3:1:3*:3:1 by Provider Facility Type

[PDF file](#)

[Excel file](#)

4:3:1:3*:3:1:4 by Provider Facility Type

[PDF file](#)

[Excel file](#)

Participating in Vaccines for Children (VFC) Program by State and Local area

[PDF file](#)

[Excel file](#)

Not Participating in VFC by State and Local Area

[PDF file](#)

Demographics Selected Socio-Demographics

[Excel file](#)

Socio-Demographics: Poverty, Provider Type, Race, MSA, and VFC eligibility

[PDF file](#)

Table data can be found at:

<http://www.cdc.gov/vaccines/imz-managers/coverage/nis/child/data/tables-2014.html>

Vaccine-Preventable Diseases ACIP: Advisory Committee on Immunization Practices

Anthrax	Cervical Cancer	Diphtheria
Hepatitis A	Hepatitis B	Haemophilus influenzae type b (Hib)
Human Papillomavirus (HPV)	H1N1 Flu (Swine Flu)	Influenza (Seasonal Flu)
Japanese Encephalitis (JE)	Measles	Meningococcal
Mumps	Pertussis (Whooping Cough)	Pneumococcal
Poliomyelitis (Polio)	Rabies	Rotavirus
Rubella (German Measles)	Shingles (Herpes Zoster)	Smallpox
Tetanus (Lockjaw)	Tuberculosis	Typhoid Fever
Varicella (Chickenpox)	Yellow Fever	

Table data can be found at:

<http://www.cdc.gov/vaccines/vpd-vac/default.htm>

List of Vaccines Used in United States (Links to Basic and Clinical information about the vaccine).

<http://www.cdc.gov/vaccines/vpd-vac/vaccines-list.htm>

Primary Changes and Updates in the Recommendations
Advisory Committee on Immunization Practices—(ACIP)—United States,

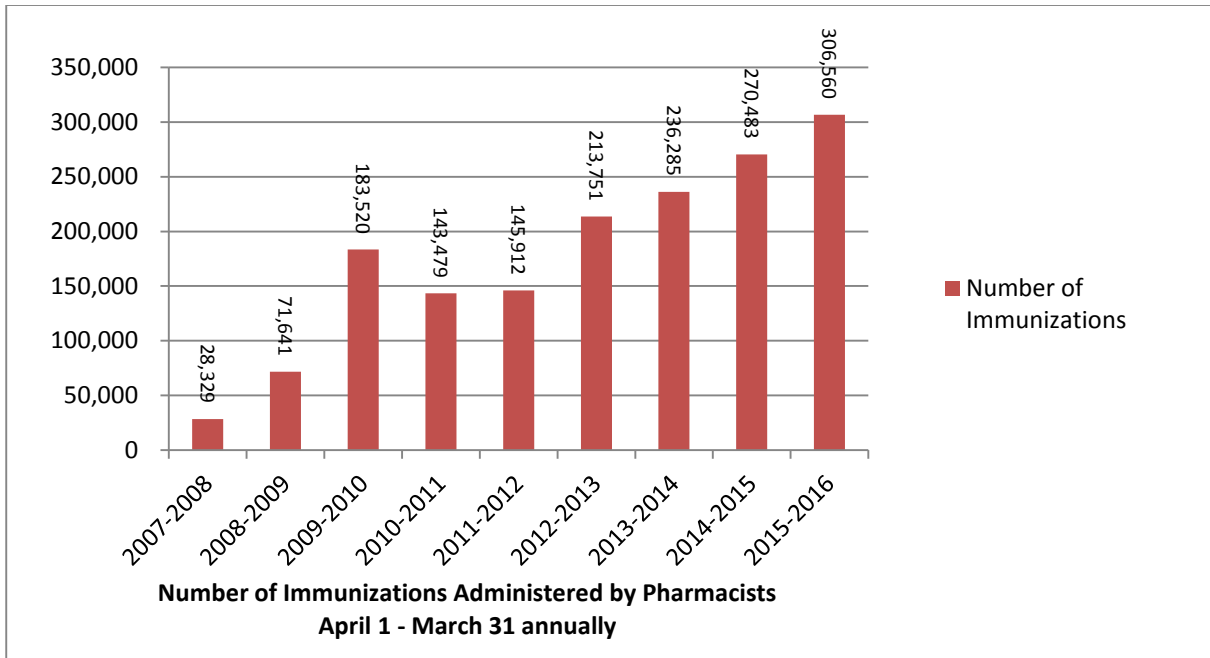
<http://www.cdc.gov/vaccines/hcp/acip-recs/index.html>

PHARMACIST ADMINISTERED IMMUNIZATIONS

The following table is the most accurate data available on immunizations administered by pharmacists in the time frame of this report.

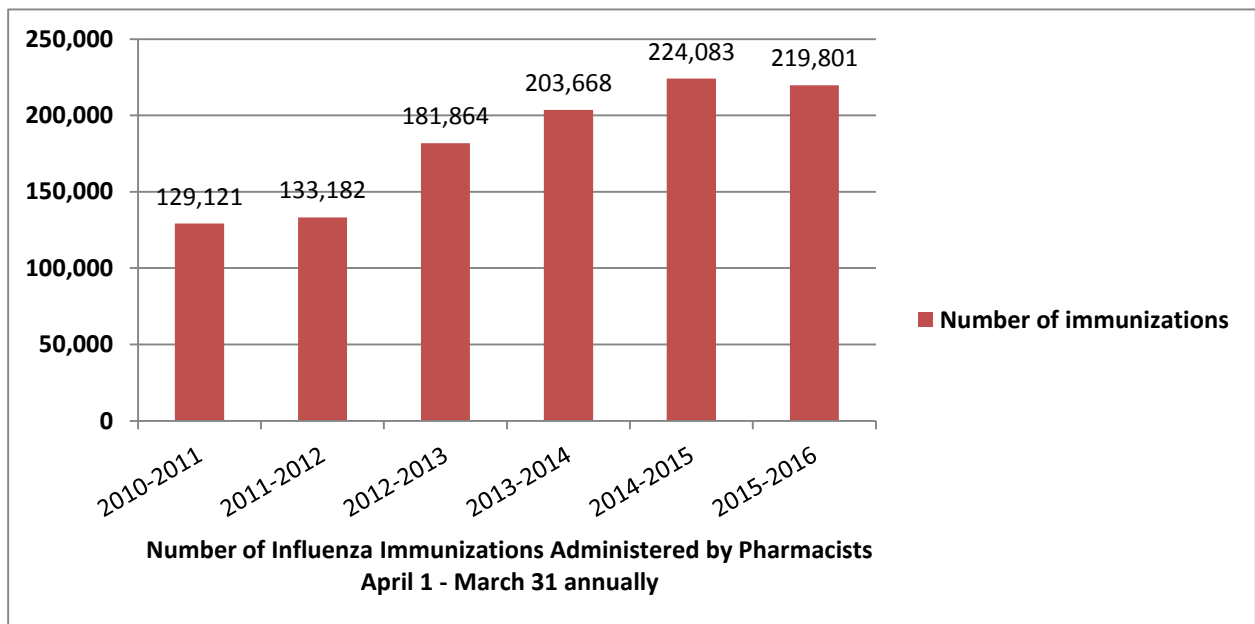
(April 1, 2015– March 31, 2016)

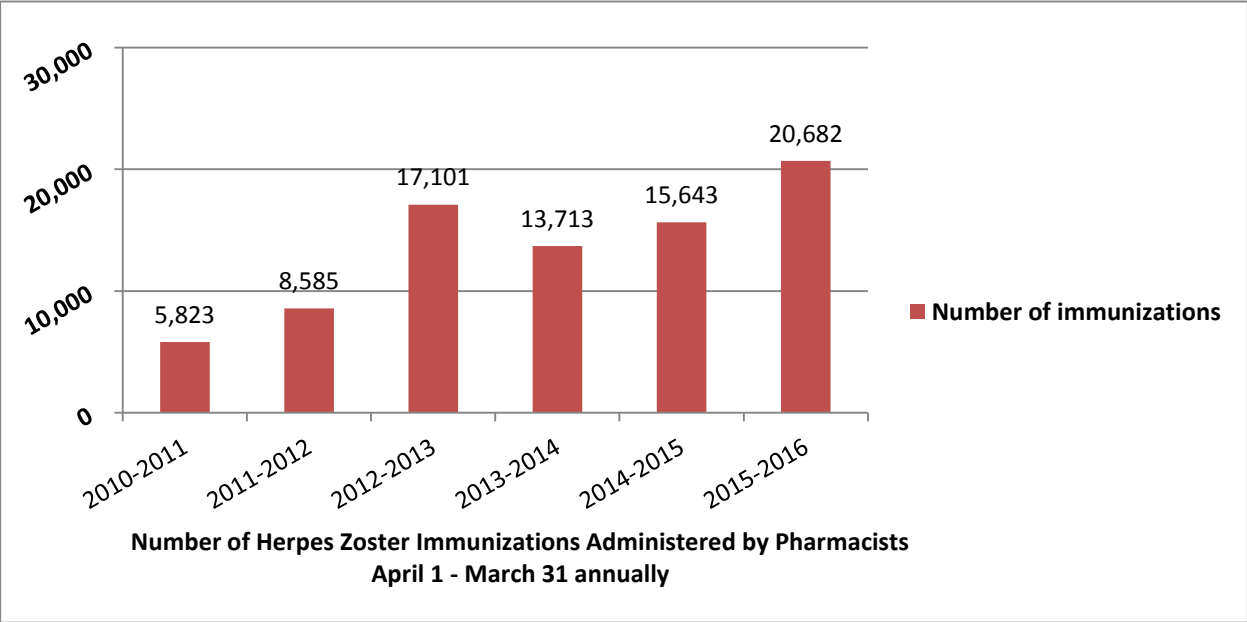
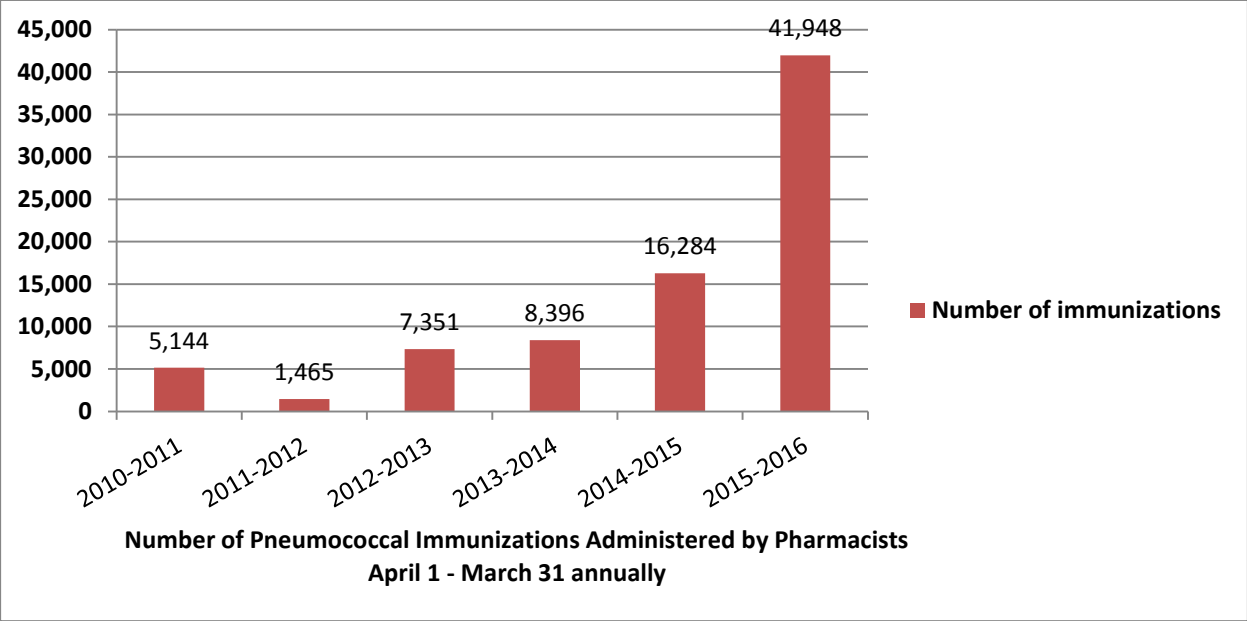
Vaccines	
Diphtheria	12385
Hepatitis A	1607
Hepatitis A Inactivated & Hepatitis B (Recombinant) Vaccine	497
Hepatitis B	2348
Herpes Zoster (shingles)	20682
HPV (Human Papillomavirus)	1142
Influenza (includes nasal/HD)	219801
Japanese Encephalitis Vaccine	16
Measles Mumps Rubella (MMR)	1417
Meningococcal diseases	548
Pneumococcal diseases	41948
Polio	100
Rabies	3
Rotavirus	0
Rubella	0
Smallpox	2
DTap Tdap	50
Tetanus	2081
Typhoid	75
Varicella (chicken pox)	217
Yellow Fever	243
Other	1398

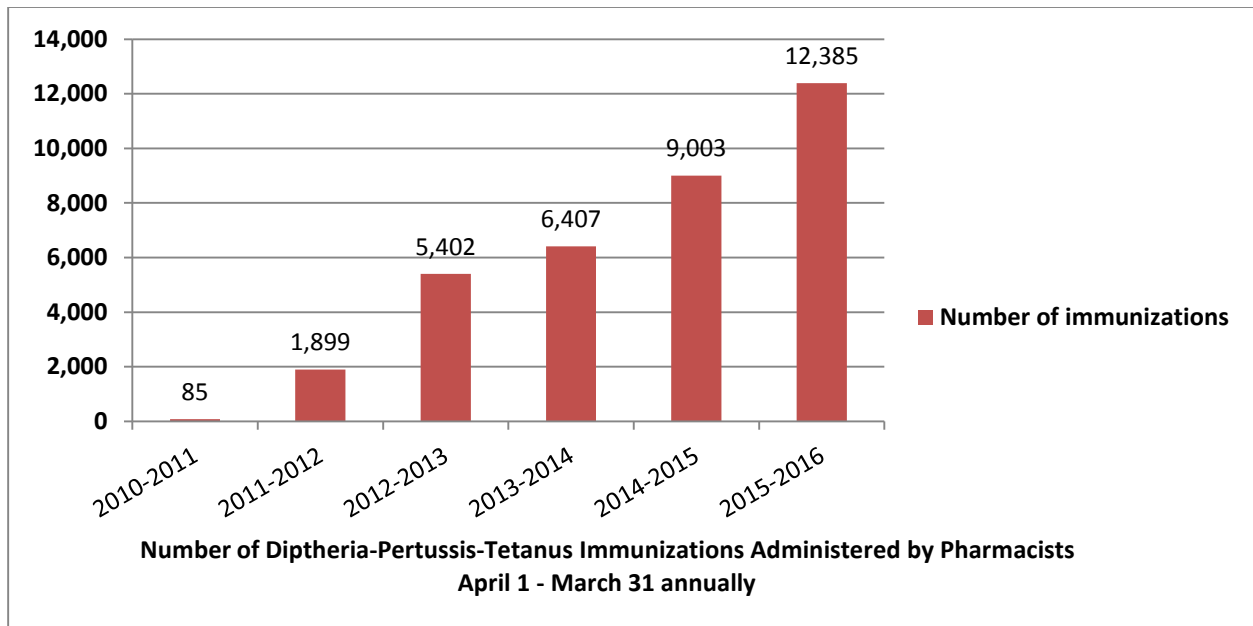


Note: In the 2009-2010 flu season the H1N1 vaccine was a separate vaccine from the seasonal influenza vaccine.

Specific immunizations administered by Pharmacists







ADVERSE DRUG REACTIONS

Less than a dozen adverse reactions were reported by patients to pharmacies. These adverse reactions are based on patient reporting only, not from health care practitioners who may have seen the patient after administration of the vaccine.

- TDap (2)
 - Pain at site of injection
- Flu Vaccine (16)
 - Tingling in arm, shaking, shivering, weakness and rapid heart rate
 - Soreness at site of injection
- Pneumonia Vaccine (15)
 - Patient had pain at injection site.
 - Rash, warmth and redness at injection site
- Zostavax Vaccine (7)
 - Bruising at site of injection
 - Soreness, redness and inflammation
- Varicella (2)
 - Swelling and redness at site of injection
- Typhoid (1)
 - Fever, vomiting, diarrhea and rash
- Yellow fever
 - Nausea, lightheadedness and pale
 - Patient's arm was swollen for several days

CENTRALIZED RECORDKEEPING

LCB file R115-08 adopted by the Board made changes to reporting requirements under NAC 639.2976. These changes simplified the reporting requirements, requiring only reporting to the Immunization Information System established by the Department of Health and Human Services.

This data may be entered electronically directly into WebIZ or manually through the use of a written form. In addition to mandatory reporting as of July 1, 2009, all providers must give both children and adults a form that explains the purpose of the registry and allows them to opt-out of inclusion in the registry.

NRS 439.265: Reporting vaccinations to Nevada WebIZ

Effective January 28, 2010, all ACIP recommended vaccinations administered to children and adults must be recorded in Nevada WebIZ. This means that patients of all ages who receive a vaccination must be entered in Nevada WebIZ. Some providers have thought that the law only applies to VFC (Vaccines for Children) vaccines. The law requires entry for all vaccines, regardless of purchase method.

Individuals may “opt-out” by completing the Participation Form and the provider must mail or fax the form to the WebIZ program.

Immunizations

<http://dpbh.nv.gov/Programs/Immunizations/>

WebIZ

Go to the WebIZ home page to download and study the new regulations, forms and instructions.

<http://dpbh.nv.gov/Programs/WebIZ/WebIZ - Home/>

Public Access Portal

<https://izrecord.nv.gov/>

Prior to administering any vaccine, review and understand the complete manufacturer literature.

CONCLUSION

In addition to increasing accessibility, and with the changing recommendations increasing the number of individuals who should be immunized, the burden on other healthcare professionals is reduced by allowing and encouraging pharmacists to participate in immunization administration. As changes are made to NRS 439.265 and NAC 639.297, healthcare providers administering immunizations must be aware of new or updated recordkeeping requirements as well as changes with regard to the current recommended age and other requirements for vaccines the healthcare provider administers.

Website Information:

CURRENT IMMUNIZATION SCHEDULE RECOMMENDATIONS FROM THE CDC

2016 Recommended Immunizations for Children from Birth Through 6 Years Old

<http://www.cdc.gov/vaccines/parents/downloads/parent-ver-sch-0-6yrs.pdf>

2015 Recommended Immunizations for Children from 7 Through 18 Years Old

<http://www.cdc.gov/vaccines/who/teens/downloads/parent-version-schedule-7-18yrs.pdf>

Note: 2016 versions are expected to be available on March 28, 2016

2016 Recommended Immunizations for Adults: By AGE

<http://www.cdc.gov/vaccines/schedules/downloads/adult/adult-schedule-easy-read.pdf>

Mobile Apps (TravWell, Can I Eat This? and 2014 Yellow Book)

<http://wwwnc.cdc.gov/travel/page/apps-about>

Disease Directory (Information for travelers about specific diseases which can affect them while traveling).

<http://wwwnc.cdc.gov/travel/diseases>

Influenza Vaccines — United States, 2015–16 Influenza Season

<http://www.cdc.gov/flu/protect/vaccine/vaccines.htm>

ADVISORY COMMITTEE FOR IMMUNIZATION PRACTICES (ACIP) RECOMMENDATIONS

Vaccines Included in the Immunization Schedules for Children, Adolescents, and Adults

<http://www.cdc.gov/vaccines/acip/committee/guidance/vac-abbrev.html>

Vaccine-Preventable Diseases

<http://www.cdc.gov/vaccines/vpd-vac/default.htm> (Vaccines and Immunizations)

<http://www.cdc.gov/vaccines/hcp/acip-recs/index.html> (Vaccine Recommendations of the ACIP Advisory Committee for Immunization Practices (ACIP))

<http://www.cdc.gov/flu/professionals/acip/2013-summary-recommendations.htm#primary-changes> (Summary* Recommendations: Prevention and Control of Influenza with Vaccines: Recommendations of the Advisory Committee on Immunization Practices—(ACIP)—United States, 2013-14)

NEVADA STATE HEALTH DIVISION: WEBIZ CONTACT INFORMATION

http://dpbh.nv.gov/Programs/WebIZ/WebIZ_-_Home/

NEVADA IMMUNIZATION COALITION

<http://www.immunizenevada.com>