

**NEVADA STATE BOARD OF
PHARMACY**

**IMMUNIZATION
REPORT**

April 1, 2016 – March 31, 2017

**NEVADA STATE BOARD OF PHARMACY
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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

Nevada Immunization % by vaccine type, children ages 19-35 months (from ChildVaxView data, National Immunization Survey (NIS), 2015))

To compare to other states, go to:

<https://www.cdc.gov/vaccines/imz-managers/coverage/childvaxview/data-reports/>

- Diphtheria toxoid, Tetanus toxoid, acellular Pertussis (DTaP) vaccination coverage 83%
- Polio vaccination coverage among children 19-35 months 80.6%
- Childhood Measles, Mumps, and Rubella (MMR) Vaccination Coverage 93.7%
- Haemophilus influenzae type b (Hib) vaccination coverage 78.2%
- Childhood Hepatitis B (HepB) Vaccination Coverage 94.4%
- Varicella vaccination coverage among children 92.9%
- Results for Childhood Pneumococcal Conjugate Vaccine (PCV) Coverage 77.1%
- Childhood Hepatitis A (HepA) Vaccination Coverage Report 90.2%
- Rotavirus Vaccination coverage 65.5%
- Combined 3-vaccine Series Vaccination 83.2%
- Combined 4-vaccine Series Vaccination coverage 77.1%
- Combined 5-vaccine Series Vaccination 76.1%
- Combined 6-vaccine Series Vaccination 74.9%
- Combined 7-vaccine Series Vaccination 71.3%

Percent of children 19-35 months old receiving vaccinations (US):

- Diphtheria, Tetanus, Pertussis (4+ doses DTP, DT, or DTaP): 84.2%
- Polio (3+ doses): 93.3%
- Measles, Mumps, Rubella (MMR) (1+ doses): 91.5%
- *Haemophilus influenzae* type b (Hib) (primary series + booster dose): 82.0%
- Hepatitis B (Hep B) (3+ doses): 91.6%
- Chickenpox (Varicella) (1+ doses): 91.0%
- Pneumococcal conjugate vaccine (PCV) (4+ doses): 82.9%
- Combined 7-vaccine series: 71.6%

Related FastStats

- [Influenza](#)
- [Pneumonia](#)

More data

- [Early release of selected estimates from the National Health Interview Survey](#)
- Influenza vaccination among adults by selected characteristics: United States [Health, United States, 2015, table 68\[PDF - 9.8 MB\]](#)
- Pneumococcal vaccination among adults by selected characteristics: United States [Health, United States, 2015, table 69\[PDF - 9.8 MB\]](#)
- Vaccination coverage among adolescents 13-17 years of age [Health, United States, 2015, table 67\[PDF - 9.8 MB\]](#)
- [Vaccination Coverage among Adults with Diagnosed Diabetes, United States, 2015](#)

<https://www.cdc.gov/nchs/fastats/immunize.htm>

Vaccination coverage for selected diseases among adolescents aged 13-17 (US).

- Measles, mumps, rubella (2 doses or more)..... 90.7
- Hepatitis B (3 doses or more)..... 91.4
- History of varicella or received varicella vaccine (2 doses or more)..... 85.0
- Tdap (1 dose or more)..... 87.6
- Meningococcal conjugate vaccine (MenACWY) (1 dose or more)..... 79.3
- Human papillomavirus (HPV) (3 doses or more among females)..... 39.7
- Human papillomavirus (HPV) (3 doses or more among males)..... 21.6

<https://www.cdc.gov/nchs/data/hus/hus15.pdf#067>

Recommended Immunization Schedule for Children and Adolescents Aged 18 Years or Younger, UNITED STATES, 2017

<https://www.cdc.gov/vaccines/schedules/hcp/child-adolescent.html>

Recommended Immunization Schedules for Adults

<https://www.cdc.gov/vaccines/schedules/hcp/adult.html>

ACIP Vaccine Recommendations (Advisory Committee for Immunization Practices (ACIP))

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

Recommended Vaccines by Disease

Vaccines are available for these 18 dangerous or deadly diseases. Over the years, these vaccines have prevented countless cases of disease and saved millions of lives. Infants, children, adolescents, teens and adults need different vaccinations, depending on their age, location, job, lifestyle, travel schedule, health conditions or previous vaccinations.

Click on a disease name to learn more about the diseases and the vaccines that prevent them.

Chickenpox (Varicella)
Diphtheria
Flu (Influenza)
Hepatitis A
Hepatitis B
Hib (*Haemophilus influenzae* type b)
HPV (Human Papillomavirus)
Measles
Meningococcal
Mumps
Pneumococcal
Polio (Poliomyelitis)
Rotavirus
Rubella (German Measles)
Shingles (Herpes Zoster)
Tetanus (Lockjaw)
Whooping Cough (Pertussis)

Non-routine Vaccines by Disease

People in certain research jobs and travel situations may be exposed to dangerous or deadly diseases that are no longer common in the U.S. Because of the increased risk of disease exposure in these instances, these 7 non-routine vaccines are available, listed below by disease. These are considered non-routine vaccines because they are not part of the recommended immunization schedules for children, adolescents and adults.

Anthrax
Japanese Encephalitis (JE)
Rabies
Smallpox
Tuberculosis
Typhoid Fever
Yellow Fever

Related Page

Who Should NOT Get These Vaccines? Possible Side-effects from Vaccines.

<https://www.cdc.gov/vaccines/vpd/vaccines-diseases.html>

Recommended Vaccines by Age

<https://www.cdc.gov/vaccines/vpd/vaccines-age.html>

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>

<http://www.cdc.gov/flu/professionals/acip/>

Vaccines Licensed for Immunization and Distribution in the US with Supporting Documents

This list includes only vaccines for which supporting documents were provided and is arranged alphabetically by the proper name of the product. Information is provided for original product approvals, new indications, and the current package insert. For a complete list of approved vaccines, click the link under "Related Information" at the bottom of this page.

Vaccines with Supporting Documents

- [Adenovirus Type 4 and Type 7 Vaccine, Live, Oral](#) Barr Labs, Inc.
- [Anthrax Vaccine Adsorbed](#) Emergent BioDefense Operations Lansing, Inc. (Biothrax)
- [BCG Live](#) Organon Teknika Corp (TICE BCG, BCG Vaccine)
- [Diphtheria & Tetanus Toxoids Adsorbed](#) Sanofi Pasteur, Inc
- [Diphtheria & Tetanus Toxoids & Acellular Pertussis Vaccine Adsorbed](#) Sanofi Pasteur, Inc (Tripedia); GlaxoSmithKline Biologicals (Infanrix); Sanofi Pasteur, Ltd (Daptacel)
- [Diphtheria and Tetanus Toxoids and Acellular Pertussis Adsorbed, Hepatitis B \(Recombinant\) and Inactivated Poliovirus Vaccine Combined](#) GlaxoSmithKline Biologicals (Pediarix)
- [Diphtheria and Tetanus Toxoids and Acellular Pertussis Adsorbed and Inactivated Poliovirus Vaccine](#) GlaxoSmithKline Biologicals (Kinrix)
- [Diphtheria and Tetanus Toxoids and Acellular Pertussis Adsorbed, Inactivated Poliovirus and Haemophilus b Conjugate \(Tetanus Toxoid Conjugate\) Vaccine](#) Sanofi Pasteur, Ltd (Pentacel)
- [Haemophilus b Conjugate Vaccine \(Tetanus Toxoid Conjugate\)](#) Sanofi Pasteur, SA (ActHIB); GlaxoSmithKline Biologicals, S.A., (Hiberix)

- [Haemophilus B Conjugate Vaccine \(Meningococcal Protein Conjugate\)](#) Merck Sharp & Dohme Corp. (PedvaxHIB)
- [Haemophilus b Conjugate \(Meningococcal Protein Conjugate\) and Hepatitis B \(Recombinant\) Vaccine](#) Merck & Co, Inc (Comvax)
- [Hepatitis A Vaccine, Inactivated](#) GlaxoSmithKline Biologicals (Havrix); Merck & Co, Inc (Vaqta)
- [Hepatitis A Inactivated and Hepatitis B \(Recombinant\) Vaccine](#) GlaxoSmithKline Biologicals (Twinrix)
- [Hepatitis B Vaccine \(Recombinant\)](#) Merck & Co, Inc (Recombivax HB); GlaxoSmithKline Biologicals (Engerix-B)
- [Human Papillomavirus Vaccine](#) Merck & Co, Inc (Gardasil), GlaxoSmithKline Biologicals (Cervarix)
- [Influenza A \(H1N1\) 2009 Monovalent](#) CSL Limited; MedImmune LLC; ID Biomedical Corporation of Quebec; Novartis Vaccines and Diagnostics Limited; Sanofi Pasteur, Inc.
- [Influenza Virus Vaccine, H5N1 \(for National Stockpile\)](#) Sanofi Pasteur, Inc
- [Influenza Virus Vaccine, Quadrivalent, Types A and Types B](#) MedImmune, LLC (FluMist Quadrivalent)
- [Influenza Virus Vaccine, Trivalent, Types A and B](#) CSL Limited (Afluria); ID Biomedical Corp of Quebec (FluLaval); GlaxoSmithKline Biologicals (Fluarix); Novartis Vaccines and Diagnostics, Ltd (Fluvirin); Novartis Vaccines and Diagnostics Inc. (Agriflu); Sanofi Pasteur, Inc (Fluzone); MedImmune, LLC...
- [Japanese Encephalitis Vaccine, Inactivated, Adsorbed](#) Intercell Biomedical (Ixiaro)
- [Japanese Encephalitis Virus Vaccine Inactivated](#) Research Foundation for Microbial Diseases of Osaka University (JE-Vax)
- [Measles Virus Vaccine, Live](#) Merck & Co, Inc (Attenuvax)
- [Measles, Mumps and Rubella Virus Vaccine, Live](#) Merck & Co, Inc (M-M-R II)
- [Measles, Mumps, Rubella and Varicella Virus Vaccine Live](#) Merck & Co, Inc (ProQuad)
- [Meningococcal \(Groups A, C, Y, and W-135\) Oligosaccharide Diphtheria CRM197 Conjugate Vaccine](#) Novartis Vaccines and Diagnostics, Inc. (Menveo)
- [MenHibrix](#) GlaxoSmithKline Biologicals (MenHibrix)
- [Meningococcal Groups \(A, C, Y and W-135\) Polysaccharide Diphtheria Toxoid Conjugate Vaccine](#) Sanofi Pasteur, Inc (Menactra)
- [Meningococcal Polysaccharide Vaccine, Groups A, C, Y and W-135 Combined](#) Sanofi Pasteur, Inc (Menomune-A/C/Y/W-135)
- [Pneumococcal Vaccine, Polyvalent](#) Merck & Co, Inc (Pneumovax 23)
- [Pneumococcal 7-valent Conjugate Vaccine \(Diphtheria CRM₁₉₇ Protein\)](#) Wyeth Pharmaceuticals, Inc (Prenvar)
- [Pneumococcal 13-valent Conjugate Vaccine \(Diphtheria CRM₁₉₇ Protein\)](#) Wyeth Pharmaceuticals, Inc (Prenvar 13)
- [Poliovirus Vaccine Inactivated \(Monkey Kidney Cell\)](#) Sanofi Pasteur, SA (IPOL)
- [Rabies Vaccine](#) Sanofi Pasteur, SA (Imovax); Novartis Vaccines and Diagnostics, Ltd (RabAvert)
- [Rotavirus Vaccine, Live, Oral](#) GlaxoSmithKline Pharmaceuticals (Rotarix)
- [Rotavirus Vaccine, Live, Oral, Pentavalent](#) Merck & Co, Inc (RotaTeq)

- [Rubella Virus Vaccine Live](#) Merck & Co, Inc (Meruvax II)
- [Smallpox \(Vaccinia\) Vaccine, Live](#) Sanofi Pasteur Biologics Co (ACAM2000)
- [Tetanus & Diphtheria Toxoids, Adsorbed](#) Massachusetts Public Health Biologic Lab (No Trade Name)
- [Tetanus & Diphtheria Toxoids Adsorbed for Adult Use](#) Sanofi Pasteur, Inc. (Decavac); Sanofi Pasteur, Ltd. (Tenivac)
- [Tetanus Toxoid Adsorbed](#) Sanofi Pasteur, Inc
- [Tetanus Toxoid, Reduced Diphtheria Toxoid and Acellular Pertussis Vaccine, Adsorbed](#) Sanofi Pasteur, Ltd (Adacel); GlaxoSmithKline Biologicals (Boostrix)
- [Typhoid Vaccine Live Oral Ty21a](#) Berna Biotech, Ltd (Vivotif)
- [Typhoid Vi Polysaccharide Vaccine](#) Sanofi Pasteur SA (Typhim Vi)
- [Varicella Virus Vaccine, Live](#) Merck & Co, Inc (Varivax)
- [Yellow Fever Vaccine](#) Sanofi Pasteur, Inc (YF-Vax)
- [Zoster Vaccine, Live](#) Merck & Co, Inc (Zostavax)

Related Information

- [Complete List of Vaccines Licensed for Immunization and Distribution in the US](#)
- [Vaccine Safety & Availability](#)

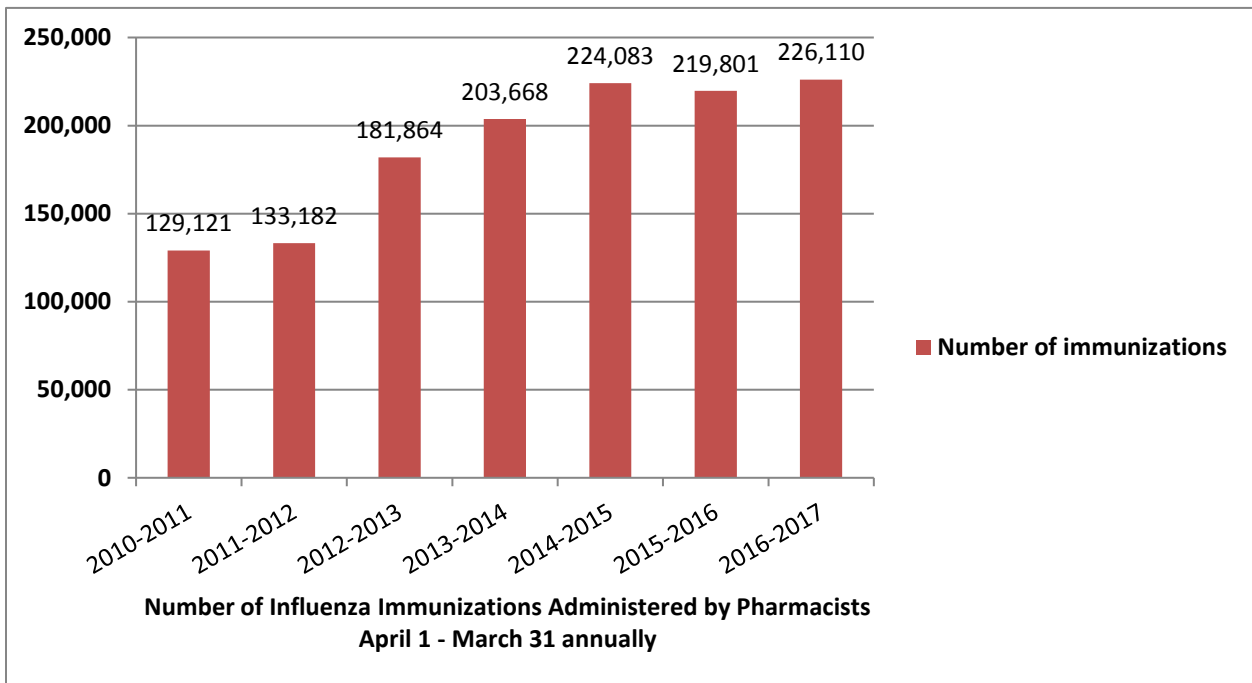
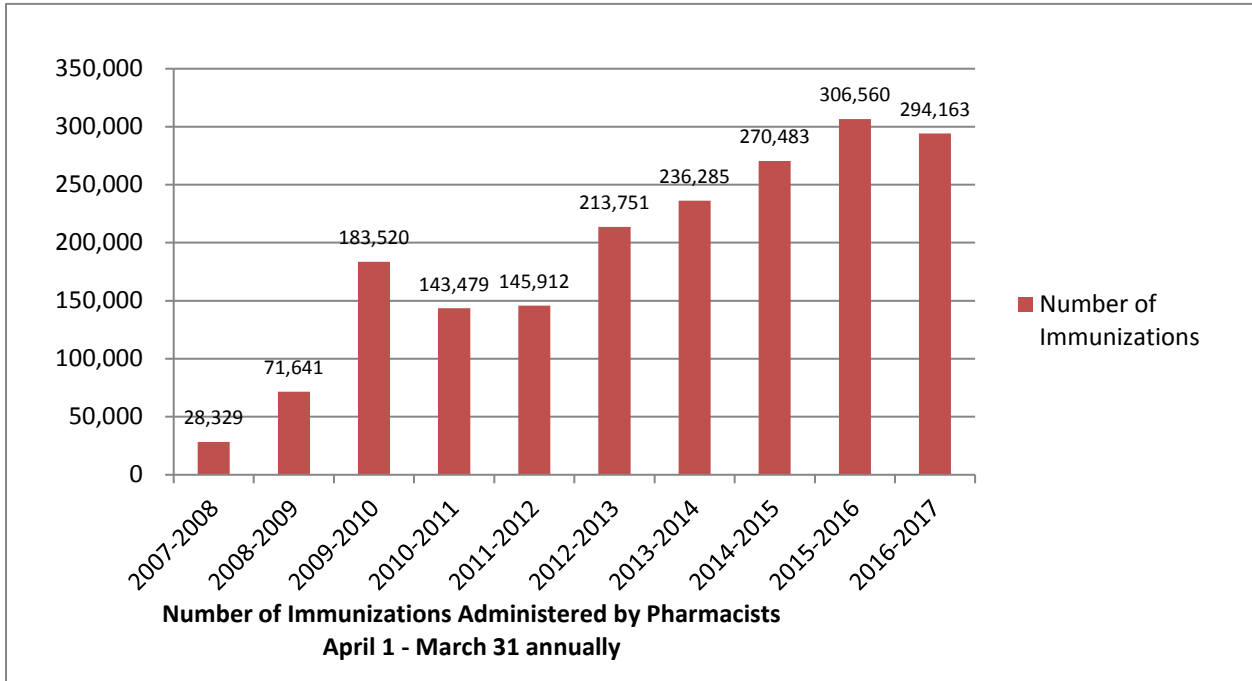
https://www.vaccines.gov/more_info/approvals/index.html

PHARMACIST ADMINISTERED IMMUNIZATIONS

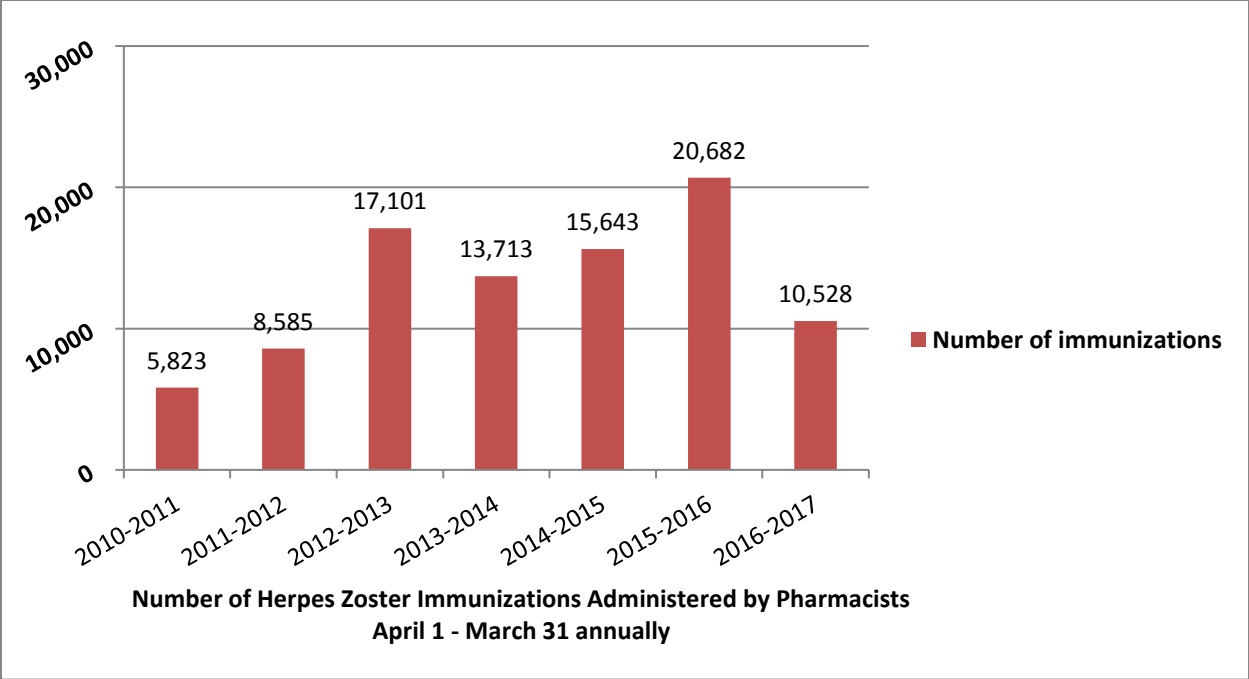
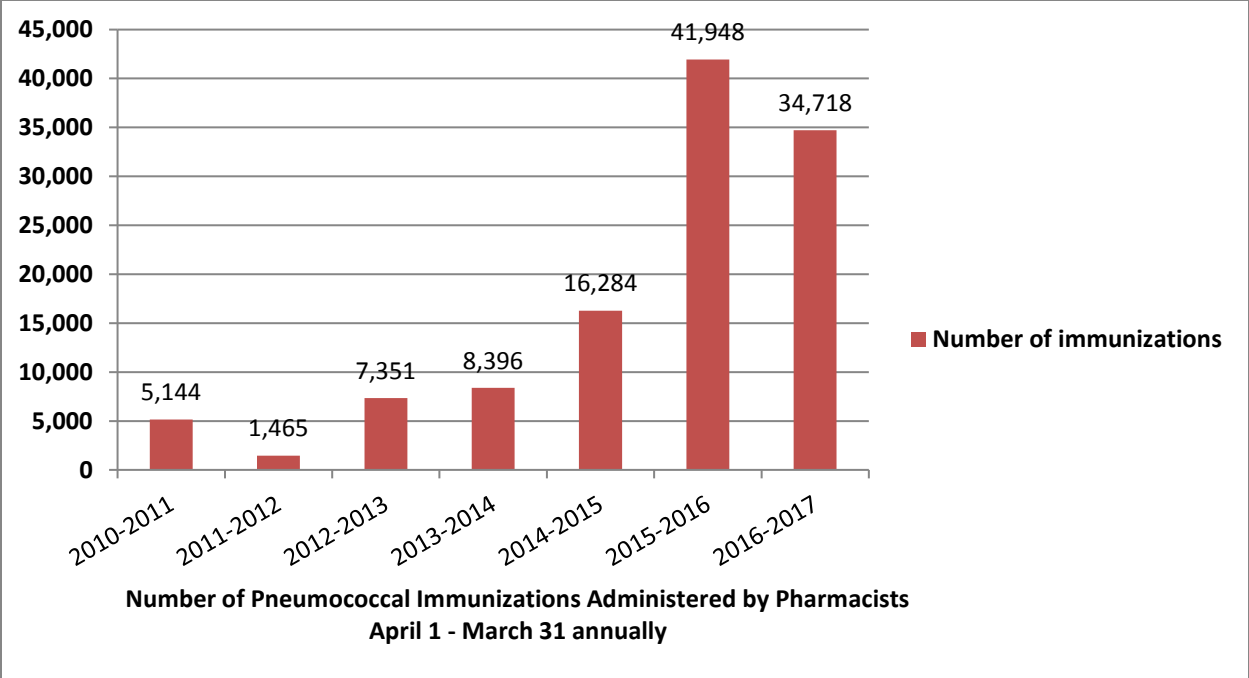
The following table is the most accurate data available on immunizations administered by pharmacists in the time frame of this report.
(April 1, 2016– March 31, 2017)

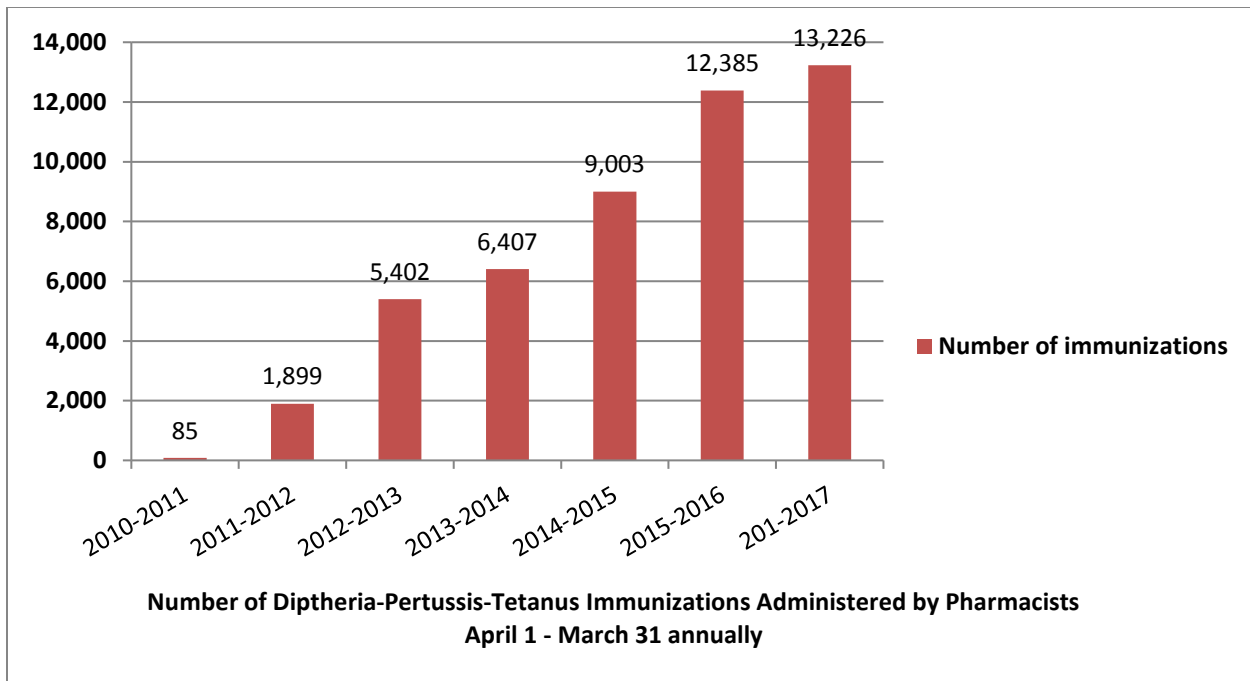
Vaccines	
Anthrax	0
Diphtheria	0
Hepatitis A	1,230
Hepatitis A Inactivated & Hepatitis B (Recombinant) Vaccine	1,443
Hepatitis B	1,352
Herpes Zoster (shingles)	10,528
HPV (Human Papillomavirus)	857
Influenza (includes nasal/HD)	226,110
Japanese Encephalitis Vaccine	24
Measles Mumps Rubella (MMR)	2,585
Meningococcal diseases	492
Pertussis (Whooping Cough)	0
Pneumococcal diseases	34,718
Polio	39
Rabies	24
Rotavirus	0
Rubella	0
Smallpox	0
DTap Tdap	13,226
Tetanus	12
Tuberculosis	0
Typhoid	746
Varicella (chicken pox)	560
Yellow Fever	111
Other	96
Total	294,163

Specific immunizations administered by Pharmacists



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





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.

(2 reports) Patient stated shingles vaccine caused skin eruptions.

Child was administered adult dose of Hepatitis B vaccine.

DPT Patient passed out after administration – 911 responded – no adverse effect otherwise noted.

Patient was administered lower dose of Hepatitis B vaccine than manufacturer's recommendation dose for patient's age.

(2 reports) Patient was administered ½ adult dose of Hepatitis B instead of pediatric recommended dose.

Patient was administered Hepatitis B outside of age recommended range.

Patient states her throat and tongue swelling post high dose flu vaccine administration. Patient advised to take Benadryl and seek medical attention.

(3 reports) Patient was administered high dose flu vaccine and was under 65.

Patient administered out of date Hepatitis A vaccine.

Patient passed out after being administered Hepatitis A vaccine. When the child regained consciousness, the child was not coherent. Paramedics were called and the child was transported to the ER room.

Patient was administered Menactra (meningococcal conjugate vaccine) instead of Menomune (Meningococcal Polysaccharide Vaccine) vaccine which should have been administered based on the patient age.

Patient was administered outdated Meningococcal vaccine.

Patient was administered varicella vaccine instead of MMR vaccine. No adverse event reported.

Patient was administered pneumococcal vaccine without meeting any of the criteria for administration.

Patient was administered pneumococcal vaccine that had outdated 2 weeks prior.

Patient was given pneumococcal vaccine but was younger than FDA guidelines for administration.

Patient was administered Prevnar 13 vaccine instead of Pneumovax 23.

Patient had mild reaction to pneumococcal vaccine reporting lip tingling, itchy and swollen eyes a headache. Primary physician recommended the patient take Benadryl.

Patient states the patient's physician said the injection of pneumococcal vaccine was too low into the muscle and was told to take Benadryl for the resultant redness and slight swelling of the patient's arm.

Patient states the injection of pneumococcal vaccine caused her arm to swell for 10 days.

(2 reports) Patient got redness, swelling and itching in the arm where the patient was administered herpes zoster vaccine.

Patient was to receive herpes zoster vaccine. Patient received a different vaccine. The patient was contacted, returned to the store, received the correct vaccine. There were no adverse effects.

Patient was administered varicella vaccine instead of herpes zoster vaccine. The patient was contacted and had no adverse effects. The patient was to return to the pharmacy for administration of the correct vaccine.

(13 reports) Flu and Pneumococcal vaccine administration with various symptoms at the site including heat, tingling, swelling, itchiness and rash.

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 regards to the current recommended age and other requirements for vaccines the healthcare provider administers.

Website Information:

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, 2016–17 Influenza Season

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

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))

NEVADA STATE HEALTH DIVISION: WEBIZ CONTACT INFORMATION

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

NEVADA IMMUNIZATION COALITION

<http://www.immunizenevada.com>