



Nevada State Board of Pharmacy  
985 Damonte Ranch Suite 206, Reno, NV 89521  
(775) 850-1440 (800)-364-2081 Fax (775) 850-1444

## **Nevada State Board of Pharmacy**

# **Immunization Report**

**April 1<sup>st</sup>, 2021 – March 31<sup>st</sup>, 2022**



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## **Introduction:**

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

This report, mandated by Nevada Revised Statute (NRS) 639.065 will review the numbers 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 may be useful in determining whether pharmacists should continue to administer immunizations in Nevada.

## **Regulations:**

**The following are the regulations related to immunizations**

**NAC 639.297 “Immunization” defined. (NRS 639.070)** As used in [NAC 639.297](#) to [639.2978](#), inclusive, unless the context otherwise requires, “immunization” means the act of inducing antibody formation through the introduction of a drug into the human body.

(Added to NAC by Bd. of Pharmacy by R009-01, eff. 11-1-2001)

**NAC 639.2971 Authorization; contents of and deviation from written protocol. (NRS 454.213, 639.070, 639.137)**

1. A physician may establish a written protocol authorizing pharmacists to administer immunizations by an intranasal, intramuscular or subcutaneous injection. Except as otherwise limited by the physician pursuant to subsection 4, any pharmacist who is trained and certified in accordance with [NAC 639.2973](#) may subscribe to the written protocol and administer immunizations in compliance with the protocol. Such a protocol must contain:

(a) The name of the physician who is authorizing the administration of immunizations by a pharmacist;

(b) The immunizations that may be administered by a pharmacist;

(c) Detailed policies and procedures that a pharmacist must follow while administering immunizations, including, without limitation, procedures to follow in the case of adverse reactions or emergencies following administration;

(d) A procedure for the review of the protocol and its operation by the physician at least once annually, and the making and keeping of a record of the review;

(e) When appropriate, specific instructions related to the age of the patient;



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(f) Except as otherwise provided in subsection 2, a restriction that a pharmacist may not delegate his or her authority to administer an immunization;

(g) A restriction that a pharmacist may not administer an immunization except at an authorized location, which location may not be the home of the patient, unless the patient resides in a licensed facility for long-term care or in a hospital;

(h) A requirement that the immunizations will be administered according to all applicable federal, state and local laws; and

(i) The signature of the physician authorizing the administration of the immunizations and the time period for which the written protocol is effective.

2. An intern pharmacist may administer immunizations by an intranasal, intramuscular or subcutaneous injection under the direct and immediate supervision of a pharmacist who has subscribed to a written protocol established by a physician.

3. If a physician orders a deviation from the written protocol for the benefit of a specific patient, the physician shall note the deviations from the written protocol in the record of the patient.

4. A physician may include restrictions to a written protocol established by the physician pursuant to subsection 1 by limiting the protocol to any of the following:

(a) A specific pharmacist or pharmacists;

(b) A specific location or locations;

(c) The administration of a specific immunization or immunizations; or

(d) Other limitations as the physician determines necessary.

(Added to NAC by Bd. of Pharmacy by R009-01, eff. 11-1-2001; A by R142-03, 4-8-2004; R180-05, 12-29-2005; R115-08, 9-18-2008)

**NAC 639.2972 Duties of authorizing physician. ([NRS 454.213](#), [639.070](#), [639.137](#))**

A physician who has authorized pharmacists to administer immunizations by establishing a written protocol shall supervise the implementation of the protocol by each pharmacist who has subscribed to the protocol and by each intern pharmacist acting under the direct and immediate supervision of the pharmacist by:

1. Being readily accessible to the pharmacist or intern pharmacist or the patient when the pharmacist is authorized to administer the immunizations for consultation, assistance and direction; and

2. If required by the written protocol, reviewing a periodic status report from a pharmacist or intern pharmacist concerning any problems, complications or emergencies encountered while administering immunizations.

(Added to NAC by Bd. of Pharmacy by R009-01, eff. 11-1-2001; A by R180-05, 12-29-2005; R115-08, 9-18-2008)



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**NAC 639.2973 Training and certification to administer immunizations. ([NRS 454.213](#), [639.070](#), [639.137](#))**

1. Before a pharmacist may administer an immunization pursuant to a written protocol or before an intern pharmacist acting under the direct and immediate supervision of a pharmacist may administer such immunizations, the pharmacist or intern pharmacist must be trained and certified to administer immunizations by completing a course approved by the Accreditation Council for Pharmacy Education that includes:

(a) Certification in life-saving techniques pursuant to the American Heart Association's Basic Cardiac Life Support for Health Care Providers or its equivalent;

(b) Education and practical training, including, without limitation, written study materials regarding techniques for administering immunizations;

(c) Evaluation of the knowledge and technique of the pharmacist or intern pharmacist in administering immunizations;

(d) Instruction consistent with the current training guidelines of the Centers for Disease Control and Prevention; and

(e) Except as otherwise provided in subsection 2, a minimum of 20 hours of instruction and practical training concerning:

(1) The standards for pediatric, adolescent and adult immunization practices recommended and approved by the United States Public Health Service Advisory Committee on Immunization Practices;

(2) Basic immunology, and vaccine and immunization protection;

(3) Diseases that are preventable through vaccination and immunization;

(4) Recommended immunization schedules;

(5) Vaccine and immunization storage and management;

(6) Informed consent;

(7) Physiology and techniques for administration of immunizations;

(8) Preimmunization and postimmunization assessment and counseling;

(9) Immunization reporting and records management; and

(10) Identification, response, documentation and reporting of adverse events.

2. In lieu of complying with the requirements of paragraph (e) of subsection 1, a pharmacist or an intern pharmacist who administers immunizations consisting exclusively of live attenuated influenza vaccine through the nasal passages of a person may complete a program of less than 20 hours of instruction which is accredited by the Accreditation Council for Pharmacy Education and includes instruction relating to:

(a) The epidemiology of influenza;

(b) The pathophysiology, clinical presentation, diagnosis, prevention and treatment of influenza;

(c) The administration, storage and handling of influenza vaccines; and

(d) The counseling of patients who will be immunized with the vaccine.



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(Added to NAC by Bd. of Pharmacy by R009-01, eff. 11-1-2001; A by R187-03, 4-8-2004; R180-05, 12-29-2005; R115-08, 9-18-2008)

**NAC 639.2974 Certification in basic cardiac life support; continuing education.** ([NRS 454.213](#), [639.070](#), [639.137](#)) A pharmacist who administers immunizations or an intern pharmacist acting under the direct and immediate supervision of a pharmacist who administers immunizations shall:

1. Maintain certification in basic cardiac life support from the American Heart Association; and
2. On or before October 31 of each year, complete:
  - (a) At least 2 hours of continuing education in a course or courses that address the life cycle of diseases, drugs and administration of immunizations; or
  - (b) A course provided by the Centers for Disease Control and Prevention regarding epidemiology and prevention of diseases which are preventable through immunization.

(Added to NAC by Bd. of Pharmacy by R009-01, eff. 11-1-2001; A by R180-05, 12-29-2005)

**NAC 639.2975 Legal possession and control of drugs administered as immunizations; drugs to counteract adverse reactions.** ([NRS 454.213](#), [639.070](#), [639.137](#))

1. The drugs administered as immunizations by a pharmacist or an intern pharmacist acting under the direct and immediate supervision of a pharmacist must be in the legal possession of:
  - (a) The pharmacy that employs the pharmacist or intern pharmacist who will be administering the immunizations, which pharmacy is responsible for the drugs and the maintenance of records of administration of the immunizations; or
  - (b) The physician who has established a written protocol for the administration of the immunizations, which physician is responsible for the drugs and the maintenance of records of administration of the immunizations.
2. The drugs used for immunizations must be transported and stored at the proper temperatures indicated for the drugs by the manufacturer.
3. While engaged in the administration of immunizations, a pharmacist or an intern pharmacist acting under the direct and immediate supervision of a pharmacist may have in his or her custody and control the drugs for immunization that are identified in the written protocol and any other dangerous drugs listed in the written protocol to treat an adverse reaction.
4. If a pharmacist or an intern pharmacist acting under the direct and immediate supervision of a pharmacist administers immunizations at a location other than a pharmacy, the pharmacist or intern pharmacist must return all unused drugs to the pharmacy or physician responsible for the drugs.



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**NAC 639.2976 Reporting of certain information concerning immunizations. ([NRS 454.213](#), [639.070](#), [639.137](#))** A pharmacist or an intern pharmacist acting under the direct and immediate supervision of a pharmacist who administers immunizations shall report the information required for inclusion in the Immunization Information System established by the Department of Health and Human Services pursuant to [NRS 439.265](#) and the regulations adopted pursuant thereto.

(Added to NAC by Bd. of Pharmacy by R009-01, eff. 11-1-2001; A by R180-05, 12-29-2005; R115-08, 9-18-2008)

On September 21st, 2020 the board addressed the issue of pharmaceutical technicians administering immunizations:

**The Board has amended the Nevada Administrative Code to authorize pharmaceutical technicians with appropriate training to administer immunizations under the direct supervision of a pharmacist. This will allow pharmacies to meet the increased demand for vaccine services and increase the State's capacity to expediently treat Nevada's population now that COVID-19 vaccines are being developed and deployed.**

A few other waivers intended to assist with the overwhelming need of pharmacy personnel to assist with immunizations were adopted during the pandemic.

The Board has temporarily authorized intern pharmacists with appropriate training to administer immunizations under the State's COVID-19 Vaccination Program under the indirect supervision of a pharmacist

The Board has partially waived existing regulations to permit pharmaceutical technicians with appropriate training to prepare COVID-19 vaccines for administration to patients under the indirect supervision of a pharmacist.

**Detailed information regarding the amendment and waivers can be found on the Nevada State Board of Pharmacy Website.**



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### **Nevada Pharmacy Personnel Administered Immunization:**

The following table is the most accurate data available on immunizations administered by pharmacy personnel from April 1<sup>st</sup>, 2021 – March 31<sup>st</sup>, 2022. The source of the data is WebIZ.

<b>Vaccine</b>	<b>Number of immunizations administered</b>
Hepatitis A (Pediatric/Adolescent/Adult)	3,074
Hepatitis B	5,631
HPV (Human Papillomavirus)	4,098
Influenza	427,164
Measles, Mumps, Rubella (MMR)	3,065
Meningococcal diseases	5,375
Pneumococcal diseases	22,534
Polio (inactivated)	237
Tdap (Diphtheria, tetanus toxoids, and acellular pertussis)	31,049
Typhoid	151
Varicella (chicken pox)	1,488
Zoster Vaccine subunits	74,519
COVID	2,249,216
Total	2,827,601



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**Comparative Data:**

**Total number of immunizations administered by pharmacy staff annually:**

Year	Number of immunizations administered
2010 - 2011	143,479
2011 - 2012	145,912
2012 - 2013	213,751
2013 - 2014	236,285
2014 - 2015	270,483
2015 - 2016	306,560
2016 - 2017	294,163
2017 - 2018	334,715
2018 - 2019	418,177
2019 - 2020	514,325
2020 - 2021	944,235
2021 - 2022	2,827,601

**Total number of influenza immunizations administered by pharmacy staff annually:**

Year	Number of immunizations administered
2010 - 2011	129,121
2011 - 2012	133,182
2012 - 2013	181,864
2013 - 2014	203,668
2014 - 2015	224,083
2015 - 2016	219,801
2016 - 2017	226,110
2017 - 2018	263,218
2018 - 2019	301,568
2019 - 2020	350,574
2020 - 2021	456,403
2021 - 2022	427,164





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## **Discussion:**

The overall increase in total vaccinations is directly related to the COVID-19 pandemic that began in early 2020. The accessibility of vaccines during this reporting period in addition to booster vaccinations for COVID-19 significantly increased the number of COVID-19 immunization doses. Pharmacy staff held a significant role in the COVID-19 vaccination process as documented by the 2,249,216 vaccines administered during the timeframe listed. The utilization of both pharmacy interns and pharmaceutical technicians to assist with the vaccination process was essential in fulfilling the needs of the public. Pharmacies were the main point of contact for the majority of patients who requested the COVID-19 vaccine. Nevada State Board of Pharmacy personnel worked with all stakeholders throughout the process to ensure a smooth and successful outcome as it related to pharmacy personnel providing the COVID-19 vaccine. Pharmacists will continue to play an active role in the administration of COVID-19 vaccines throughout the pandemic.



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### Adverse Drug Reactions/Administration Errors:

The following table is based upon information received from pharmacies based on a voluntary self-reporting system for immunizations administered from April 1<sup>st</sup>, 2021 – March 31<sup>st</sup>, 2022.

Vaccine	Adverse Reaction	Improper Administration	Incorrect Age	Incorrect Dose	Other
Hepatitis A					
Hepatitis B		1		1	
HPV		1			
Influenza	7	6	5		
MMR			2		
Meningococcal					
Pneumococcal			3		
Polio					
Tdap	2	2			
Typhoid					
Varicella					
Zoster	3	3			
COVID					

### Discussion:

The overall incidence of adverse drug reactions/administration errors remains extremely low. The reporting information is based on self-reporting from pharmacies as there is no State database to track this information. The lack of a centralized reporting database for this information is directly related to the low incidence of reporting.



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### **Immunization Reporting:**

Effective January 28<sup>th</sup>, 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 WebIZ. The law requires entry for all vaccines, regardless of purchase method.

WebIZ contact information:

Help Desk phone number – 775-684-5954

E-mail – [izit@health.nv.gov](mailto:izit@health.nv.gov)

Website – [www.webiz.nv.gov](http://www.webiz.nv.gov)

### **Conclusion:**

Pharmacist administration of immunizations continues to increase with the addition of new products and increased patient awareness of the benefits of immunizations. Allowing pharmacists to provide this service decreases the burden on other healthcare entities and the availability of locations in every area allows for easy patient access. This was clearly evident during the COVID-19 pandemic.