



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 1st, 2019 – March 31st, 2020



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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)

NAC 639.2977 Maintenance of records. ([NRS 454.213](#), [639.070](#), [639.137](#))

1. Each record required to be made pursuant to [NAC 639.297](#) to [639.2978](#), inclusive, must be kept for at least 2 years by the pharmacist or intern pharmacist administering the immunization and the pharmacy or physician who possessed the drugs administered. Such records must be available for inspection and copying by the Board or its representative, or any other authorized federal, state or local law enforcement or regulatory agency.

2. Records required pursuant to this section may be maintained in an alternative data retention system, including, without limitation, a computer data processing system or direct imaging system, if:

(a) The records maintained in the alternative system contain all the information required for a written record; and

(b) The data processing system is capable of producing a printed copy of the record upon the request of the Board, its representative or any other authorized federal, state or local law enforcement or regulatory agency.

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

NAC 639.2978 Confidentiality of records. ([NRS 454.213](#), [639.070](#), [639.137](#))

1. A pharmacist or an intern pharmacist acting under the direct and immediate supervision of a pharmacist shall provide adequate security to prevent unauthorized access to confidential records of immunizations. If confidential health information is not transmitted directly between a pharmacy and a physician, but is transmitted through a data communication device, the confidential health information must not be viewed or used by the operator of the data communication device unless the operator is specifically authorized to obtain confidential information pursuant to this subsection.

2. Except as otherwise provided in [NRS 49.245](#), the confidential records of immunizations are privileged and may be released only to:

(a) The patient or the authorized agent of the patient;



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(b) Physicians and other pharmacists or intern pharmacists acting under the direct and immediate supervision of pharmacists when, in the professional judgment of the pharmacist or intern pharmacist, such release is necessary to protect the health and well-being of the patient;

(c) The Board or other federal, state or local agencies authorized by law to receive such information;

(d) A law enforcement agency engaged in the investigation of a suspected violation involving a controlled substance or dangerous drug;

(e) A person employed by any state agency that licenses a physician if such a person is engaged in the performance of his or her official duties; or

(f) An insurance carrier or other third-party payor authorized by a patient to receive such information.

3. The provisions of this section must not be construed to affect or alter the provisions of [NRS 49.215](#) to [49.245](#), inclusive, relating to the confidentiality of communications between a doctor and a patient.

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



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Nevada Pharmacist Administered Immunization:

The following table is the most accurate data available on immunizations administered by pharmacists from April 1st, 2019 – March 31st, 2020. The source of the data is WebIZ.

Vaccine	Number of immunizations administered
Hepatitis A (Pediatric/Adolescent/Adult)	2029
Hepatitis A & Hepatitis B	2675
Hepatitis B	3393
HPV (Human Papillomavirus)	1973
Influenza	350,574
Measles, Mumps, Rubella (MMR)	5099
Meningococcal diseases	3073
Pneumococcal diseases	41,048
Polio (inactivated)	200
Tdap (Diphtheria, tetanus toxoids, and acellular pertussis)	28,235
Tetanus and Diphtheria	192
Typhoid	487
Varicella (chicken pox)	928
Zoster Vaccine subunits	74,526
Total	514,432



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Comparative Data:

Total number of immunizations administered by pharmacists 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

Total number of influenza immunizations administered by pharmacists 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



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Discussion:

There was an overall increase of 23% in the number of total immunizations administered by pharmacists for the reporting year 2020 vs reporting year 2019. During this same timeframe there was a 16% increase in the number of influenza immunizations performed by pharmacists. There was also a 55% increase in the number of zoster immunizations performed by pharmacists.

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 1st, 2019 – March 31st, 2020.

Vaccine	Adverse Reaction	Improper Administration	Incorrect Age	Incorrect Dose	Other
Hepatitis A			1	5	3
Hepatitis A/B	1				6
Hepatitis B				1	5
HPV	1				
Influenza	15		10	1	640
MMR		1			1
Meningococcal	1				
Pneumococcal	9	1	1	2	92
Polio					
Tdap	2		1		14
Tetanus and Diphtheria					
Typhoid					
Varicella	1				
Zoster	21		14		77



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Discussion:

The overall incidence of adverse drug reactions/administration errors remains extremely low. There were a total of 89 reported incidences compared to 514,432 administered immunizations. The "other" column is related to a temperature variance at one retail pharmacy. The pharmacy self reported the incident to NVBOP and contacted all patients impacted by the potential issue and all patients were offered an additional immunization.

Immunization Reporting:

Effective January 28th, 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

Website – 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. The low overall adverse drug reactions/administration errors rate is directly related to the knowledge and continuing education requirements that pharmacists must perform in order to provide this service to patients.