# NEVADA STATE BOARD OF PHARMACY

# IMMUNIZATION REPORT

## April 1, 2009 – March 31, 2010

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@PHAMACY.NV.GOV

## INTRODUCTION

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

This report, mandated by Nevada Revised Statue (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 least immunized states in the nation. In the interest of better serving the people of Nevada, NRS 454.213 (17) 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 drug. [Effective January 1, 2008.]

17. 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.

## REGULATORY CHANGES

In September of 2008, The Board amended the immunization regulations to allow pharmacists, trained and certified by completing a course approved by the Accreditation Council for Pharmacy Education, to administer immunizations by intranasal, intramuscular or subcutaneous injection under a written protocol with a physician. (LCB file R115-08)

- The protocol must be reviewed annually and a record of the review must be kept.
- A physician may approve a deviation from the protocol by noting the deviation in the patient's chart.
- The physician may include restrictions to the written protocol.
- The regulation also requires pharmacists to submit data on all immunizations they administer to the Immunization Information system established by the Department of Health and Human Services.
- Recognizing the importance of complete and accurate data on immunizations administered in Nevada, The Board approved two hours of accredited continuing education for Pharmacists who enroll in and complete training on how to access and enter data in the Nevada WebIZ immunization registry. NAC 639.297 through 639.2978, as adopted by the Board, describe the rights and responsibilities of immunizing pharmacists.

## THE STATE OF IMMUNIZATIONS IN THE STATE OF NEVADA

**Estimated Vaccination Coverage* with Individual Vaccines and Selected Vaccination Series Among Children 19-35 Months of Age by State and Local Area US, National Immunization Survey, Q1/2008-Q4/2008[†]**

* Estimate=NA (Not Available) if the unweighted sample size for the numerator was <30 or (CI half width)/Estimate > 0.5 or (CI half width) >10. (The National Immunization Survey (NIS) has a sample size of about 30,000 children.)Estimates presented as point estimate (%) ± 95% Confidence Interval.

[†] Children in the Q1/2008-Q4/2008 National Immunization Survey were born between January 2005 and June 2007.

[‡] 4 or more doses of any diphtheria and tetanus toxoids and pertussis vaccines including diphtheria and tetanus toxoids, and any acellular pertussis vaccine (DTaP/DTP/DT).

| | 4+DTaP[‡] | 3+Polio[§] | 1+MMR[‖] | 3+Hib[¶] | 3+HepB** | 1+HepB 3 day[††] |
|---|---|---|---|---|---|---|
| **US National** | 84.6±1.0 | 93.6±0.6 | 92.1±0.7 | 90.9±0.7 | 93.5±0.7 | 55.3±1.3 |
| **Nevada** | 76.0±6.0 | 89.9±4.2 | 88.0±4.4 | 85.2±4.9 | 84.9±4.9 | 65.5±6.6 |
| | **1+Var[‡‡]** | **4+PCV7[§§]** | **2+HepA[‖‖]** | **4:3:1:3:3[¶¶]** | **4:3:1:3:3:1[***]** | **4:3:1:3:3:1:4[†††]** |
| **US National** | 90.7±0.7 | 80.1±1.1 | 40.4±1.2 | 78.2±1.1 | 76.1±1.1 | 68.4±1.2 |
| **Nevada** | 86.8±4.7 | 63.6±6.7 | 45.9±7.0 | 70.1±6.3 | 67.8±6.5 | 54.2±7.0 |

[§] 3 or more doses of any poliovirus vaccine.

[‖] 1 or more doses of measles-mumps-rubella vaccine.

[¶] 3 or more doses of *Haemophilus influenzae* type b (Hib) vaccine.

** 3 or more doses of hepatitis B vaccine.

[††] 1 or more doses of hepatitis B vaccine administered between birth and age 3 days.

[‡‡] 1 or more doses of varicella at or after child's first birthday, unadjusted for history of varicella illness.

[§§] 4 or more doses of pneumococcal conjugate vaccine (PCV7).

‖‖ ACIP expanded the recommendation of administering hepatitis A vaccine from ≥24 months to children aged 12-23 months in May 2006; therefore, ≥2 doses of hepatitis A coverage in the 2008 NIS is measured among 19-35 month old children. Prior years of hepatitis A data among 19-35 months of age is not available. Hepatitis A coverage among 24-35 month old children including the 2006 and 2007 NIS data are available at http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5825a1.htm and for 2003-2005 NIS data is available at http://www.cdc.gov/vaccines/stats-surv/imz-coverage.htm#chart

[¶¶] 4 or more doses of DTaP, 3 or more doses of poliovirus vaccine, 1 or more doses of any MMR, 3 or more doses of Hib, and 3 or more doses of HepB.

*** 4:3:1:3:3 plus 1 or more doses of varicella vaccine.

[†††] 4:3:1:3:3:1 plus 4 or more doses of PCV7.

Table data: http://www.cdc.gov/vaccines/stats-surv/nis/data/tables_2008.htm#overall

# Vaccine-Preventable Diseases, 2009

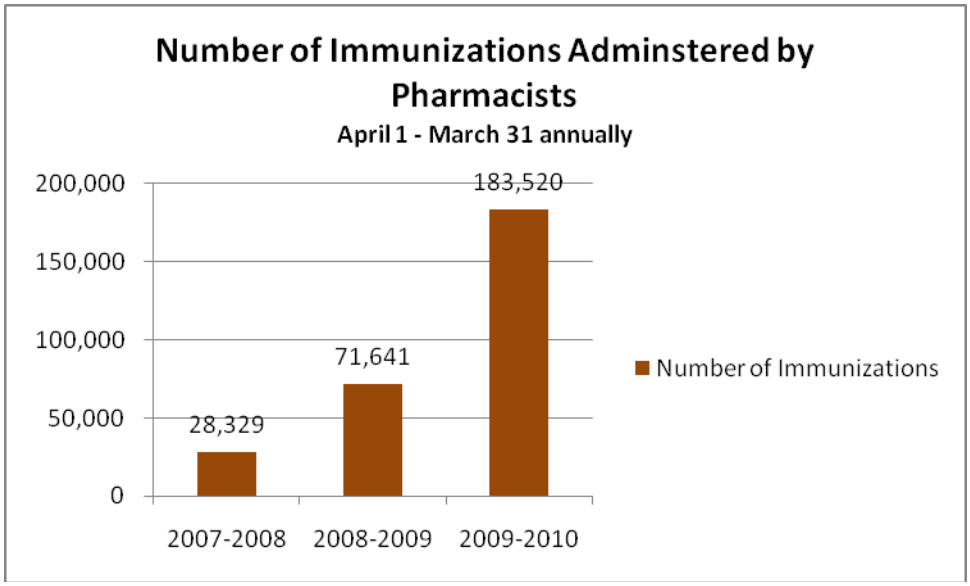
*ACIP: Advisory Committee on Immunization Practices*

| Adult | Age 7-18 Years | Age 0-6 Years |
|---|---|---|
| Tetanus | Tetanus | Tetanus |
| Diphtheria | Diphtheria | Diphtheria |
| Pertussis (whooping cough) | Pertussis (whooping cough) | Pertussis (whooping cough) |
| Measles | Measles | Measles |
| Mumps | Mumps | Mumps |
| Rubella | Rubella | Rubella |
| Varicella (chickenpox) | Varicella (chickenpox) | Varicella (chickenpox) |
| Influenza and H1N1 Influenza | Influenza and H1N1 Influenza | Influenza and H1N1 Influenza (6 mo and older) |
| Pneumococcal diseases | Pneumococcal diseases | Pneumococcal diseases |
| Hepatitis A | Hepatitis A | Hepatitis A |
| Hepatitis B | Hepatitis B | Hepatitis B |
| Meningococcal diseases | Meningococcal diseases | Meningococcal diseases |
| Herpes zoster (shingles) | Polio | Polio |
| HPV (cervical cancer) (Human Papillomavirus) | HPV (cervical cancer) (Human Papillomavirus) | HIB (Haemophilus influenza type b) |
| | | Rotavirus |

## 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, 2009 – March 31, 2010).

| Vaccines | |
|---|---|
| Diphtheria | 79 |
| Hepatitis A | 78 |
| Hepatitis B | 79 |
| [Hepatitis A Inactivated & Hepatitis B (Recombinant) Vaccine] TWINRIX ® | 33 |
| Herpes Zoster (Shingles) | 4876 |
| HPV (Human Papillomavirus) | 152 |
| Influenza (includes nasal) | 131230 |
| Influenza H1N1 (includes nasal) | 42438 |
| Measles Mumps Rubella (MMR) | 6 |
| Meningococcal diseases | 40 |
| Tetanus Diptheria Pertussis (TDAP) | 145 |
| Pneumococcal diseases | 4139 |
| Tetanus | 106 |
| Varicella (Chickenpox) | 6 |
| Typhoid | 16 |
| Other | 97 |
| Total doses administered | 183520 |



## ADVERSE DRUG REACTIONS

There were 3 reported adverse drug reactions. One adverse drug reaction resulted in a physician's office visit.

## 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.

**R094-09A: Change in Registry Regulation**

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 (unless they choose to "opt-out").

Go to the "Reports/Forms" page in Nevada WebIZ to download and study the new regulations, forms & instructions. http://health.nv.gov/Immunization_WebIZ_Policies_Forms.htm

The text of the regulation (R094-09A) can also be found at:

http://leg.state.nv.us/register/indexes/2009_NAC_REGISTER_NUMERICAL.htm

Compliance with this new law from 4/21/10 forward– there is no need to go back and enter records from 1/28/10 thru 4/21/10 (date of the email notification to providers).

WebIZ Contact Information: For more information, including how to participate, please contact:

Erin Seward, WebIZ Manager
(775) 684-3902

Amanda (Mandy) Harris,
WebIZ HelpDesk Manager
(775) 684-4258

Victor Lamas, WebIZ HelpDesk
(775) 684-5954 (local users)
1-877-NV-WebIZ (long-distance users)

Marie Tasker, WebIZ Training Manager-Southern NV
(702) 496-0474

For training opportunities in Northern Nevada, please contact Mandy Harris or Erin Seward

## IMMUNIZATION CHANGES/RECOMMENDATIONS

- Recommended Immunization Schedules 2009 for persons aged 0 through 18 years and the catch-up immunization schedule for 2009 have been approved by the Advisory Committee on Immunization Practices (ACIP), the American Academy of Pediatrics, and the American Academy of Family Physicians.
- Who should get vaccinated? All persons currently recommended for seasonal influenza vaccine, including those aged ≥65 years, should receive the seasonal vaccine.
- The 2009 recommendations included three principal changes or updates:
    - Annual vaccination of all children aged 6 months–18 years should begin as soon as the 2009–10 influenza vaccine is available. Annual vaccination of all children aged 6 months–4 years (59 months) and older children with conditions that place them at increased risk for complications from influenza should continue to be a primary focus of vaccination efforts as providers and programs transition to routinely vaccinating all children.
    - Most seasonal influenza A (H1N1) virus strains tested from the United States and other countries are now resistant to oseltamivir. CDC issued interim recommendations for antiviral treatment and chemoprophylaxis of influenza in December 2008, and these should be consulted for guidance pending recommendations from the ACIP.
    - The 2009–10 trivalent vaccine virus strains are A/Brisbane/59/2007 (H1N1)-like, A/Brisbane/10/2007 (H3N2)-like, and B/Brisbane 60/2008-like antigens.
- In general, anyone who wants to reduce their chances of getting the flu can get vaccinated. However, it is recommended by CDC and the Advisory Committee on Immunization Practices (ACIP) that certain people should get vaccinated each year. Most of these people are recommended for vaccination because they are at high risk of having serious flu complications or they live with or care for people at high risk for serious complications.
    - People recommended for vaccination during the 2009-10 flu season and in future years are:
        - Children aged 6 months up to their 19th birthday
        - Pregnant women
        - People 50 years of age and older
        - People of any age with certain chronic medical conditions
        - People who live in nursing homes and other long-term care facilities
        - People who live with or care for those at high risk for complications from flu, including:

        - Health care workers
        - Household contacts of persons at high risk for complications from the flu
    - This change will result in over 50 million additional children recommended for vaccination. Healthy non-pregnant persons aged 2 through 49 years may receive either live attenuated influenza vaccine or inactivated influenza vaccine.
- H1N1 Initial Target Groups
    - ACIP recommended that programs and providers administer vaccine to persons in the following five target groups (order of target groups does not indicate priority):
        - pregnant women,
        - persons who live with or provide care for infants aged <6 months (e.g., parents, siblings, and daycare providers),
        - health-care and emergency medical services personnel,§
        - persons aged 6 months--24 years, and
        - persons aged 25--64 years who have medical conditions that put them at higher risk for influenza-related complications.
    - These five target groups comprise an estimated 159 million persons in the United States. This estimate does not accurately account for persons who might be included in more than one category (e.g., a health-care worker with a high-risk condition). Vaccination programs and providers should begin vaccination of persons in all these groups as soon as vaccine is available.
    - Once vaccination programs and providers are meeting the demand for vaccine among the persons in the five initial target groups, vaccination should be expanded to all persons aged 25--64 years.
- Flumist intranasal spray mist (live attenuated influenza vaccine) was previously approved for use in the age range of 5 years through 49 years (non-pregnant women) from 2003 (1st year licensed) through 2007. In late 2008, based on new safety and efficacy data from the manufacturer, the FDA approved a license change that changed the approved age range to 2 years through 49 years of age.
- ACIP (June 2008) recommendation for Zostavax (Herpes Zoster) vaccine is a single dose for persons age 60 years or older regardless whether they report a prior episode of shingles.
- ACIP Provisional Recommendations:
    - Influenza
        - For the prevention and control of seasonal influenza (2010-2011 influenza season) Vaccination recommendations for adults were expanded to include all adults beginning in the 2010-11 influenza season. Therefore, all people age 6 months and older are now recommended to receive annual influenza vaccination.
    - HPV Vaccine

- On October 21, 2009, ACIP voted on updated recommendations for use of human papillomavirus (HPV) vaccine, including recommendations for the bivalent HPV (types 16 and 18) vaccine (Cervarix) for females and the quadrivalent HPV (types 6,11,16 and 18) vaccine (Gardasil) for females and males.
- Age range for male and females 9-26 years

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.

## LEGISLATIVE UPDATE – Expanding the Pharmacist Role in Healthcare

The 2009 Nevada legislature amended Chapter 639 of NRS by adding thereto a new section to read as follows:

> A registered pharmacist or a registered intern pharmacist may perform a blood glucose test using devices for monitoring approved by the Food and Drug Administration for use in the home. The performance of such a test must be in compliance with standards of practice recommended by the American Association of Diabetes Educators or its successor organization.

The change in Nevada Revised Statue allowing pharmacists to perform blood glucose testing will allow pharmacists to support medical practitioners in the care of patients with diabetes. The change increases the access of Nevada citizens to healthcare professionals who can educate, monitor and assist patients in controlling their blood glucose levels.

## Website Information:

CDC :

http://www.cdc.gov/vaccines/recs/schedules/default.htm Immunization schedules
Advisory Committee for Immunization Practices (ACIP) Recommendations
http://www.cdc.gov/vaccines/pubs/ACIP-list.htm

Nevada State Health Division:

http://health.nv.gov/Immunization_ContactUs.htm#WebIZContact WebIZ contact information

http://www.immunizenevada.com/ Nevada Immunization Coalition