DIVISION OF PUBLIC & BEHAVIORAL HEALTH

BUREAU OF CHILD, FAMILY & COMMUNITY WELLNESS

NEVADA STATE IMMUNIZATION PROGRAM (NSIP)

I. Program Overview
   a. **Nevada Immunization and Vaccine for Children Program** – annual funding awarded by the Centers for Disease Control & Prevention (CDC) via a non-competitive Cooperative Agreement; comprises the majority of program operations funding, including core staff.
   b. **Nevada Vaccines for Children (VFC) Program** – the intent of the bulk of NSIP operations funding is to administer and manage the federally mandated entitlement program that guarantees access to vaccines for eligible childhood populations. We also receive an approximate $38 million solely to purchase the vaccines at federally-contracted prices.
   c. **Discretionary Funding (317 Vaccine Funds)** – this funding source for purchasing vaccines for vulnerable (uninsured/underinsured) adult populations is being systematically decreased each year. The NSIP reserves these funds to purchase specific vaccines that are administered only to specific adult populations via pre-approved providers.
   d. **Special Projects & Programs**: Nevada Cocooning Program, HL7 Interface Program, Public Health Department Medical Billing, Adult Immunization Partnership and Improvement Project, VFC Online Ordering Transition Project, and a NV WebIZ-AFIX Enhancement Project.

II. Infectious Disease in Nevada – rates of communicable disease are low for all Nevada reportable diseases; this success is linked to state policies mandating childhood vaccination for childcare center and public/private school entry.
   a. **Pertussis** – Nevada did see increases in the incidence of pertussis in all ages over the last five (5) years, but was not as hard hit as other Western states because of the successes of policy and community engagement.
      i. Incidence Rate for new cases of lab-confirmed pertussis **in Nevada** in 2014 was 5.2/100,000 people.
      ii. Incidence Rate **for the nation** was 10.4/100,000 people.
      iii. Incidence Rate **for neighboring states**: California = 22.8/100,000; Oregon = 10.6/100,000; Idaho = 22.8/100,000; Utah = 32.4/100,000; and Arizona = 7.8/100,000.

   b. **Measles** – Significant outbreaks of measles have been recorded in California, New York and Texas. **The most recent comprehensive data for Nevada is from 2015 with 9 reported cases of measles (last reported case was from 2011) – none of the Nevada cases were associated with the Disney Land outbreak; they were imported from other travlers.** Significant outbreaks of measles occurred across the United States in 2014 and 2015. In 2014, 667 positive cases were reported – this was the greatest number of cases seen in one year since the disease was considered eliminated from North America in 2000.

   c. **Other Reportable Diseases** – rates for vaccine-preventable childhood diseases are generally low in Nevada with no significant outbreaks having occurred in childhood populations in recent years. Recent cases of vaccine-preventable meningococcal disease in adolescents and young adults across the country are a concern for every state immunization program.

d. **Influenza** – The 2015-16 Influenza Season has been more severe than the previous season in terms of burden of disease among Nevadans. As of the week ending February 20, 2016 – 2,755 positive cases of Influenza have been identified in Nevada with 65% of those cases being from a general "A" strain. Nationally, Nevada is reporting higher rates of influenza-like activity than other states and the nation. There have been 192 hospitalizations associated with influenza this season, with 80% of those occurring in Southern Nevada's jurisdiction.
    i. Influenza vaccinations are down slightly this season compared to the previous; likely because of the late onset of severe disease outbreak across the nation. In 2014-15, 556,000 Nevadans received an influenza vaccine; only 552,330 Nevadans have received an influenza vaccine this season (decrease of < 1%). More concerning is the influenza vaccination rate for children under 18 years as 8,050 less minors were vaccinated this season (decrease of 5.3%).

III. Nevada's Childhood & Adolescent Immunization Rates

a. **Childhood Immunization Rates** – measured for children aged 19-35 months as reported by the National Immunization Survey (NIS), 2014. **Nevada's childhood immunization rate** for the standard series in 2014 **was 67.7%** with a 6.6% standard deviation and our **national rank was 38th**. The standard series being assessed includes 4 DTaP, 3 Polio, 1 MMR, 3 Hib, 3 Hep-B, 1 Varicella and 4 Pneumococcal doses (i.e., the 4:3:1:3:3:1:4 series).
    i. **Ongoing Struggles**:
        - The 4th DTaP Dose
        - The 4th Pneumococcal Dose

b. **Adolescent Immunization Rates** – measured for adolescents aged 13-17 years as reported by the NIS-Teen, 2014. Adolescent immunization rates are calculated by assessing whether an appropriate-aged teenager has received at least one (1) dose of Tdap vaccine, at least one (1) dose of Meningococcal vaccine, and how far the teen is with completing the HPV series. NIS Teen rates are presented per vaccine.
    i. Estimated **coverage with at least one (1) dose of Tdap vaccine for Nevada teens is 87.6%,** equal to the national average for 2014. Nevada ranks 25th in the nation for coverage with this vaccine. Nevada is successful in this measure because of the state mandate requiring all adolescents entering 7th grade to receive a dose of Tdap prior to school enrollment.
    ii. Estimated **coverage with at least one (1) dose of Meningococcal conjugate vaccine for Nevada teens is 66.5%,** below the national rate of 79%, but an improvement from 2013 when Nevada's rate was only 63% (one-year increase of 5.5%)!
    iii. Estimated **coverage with at least one (1) dose of HPV vaccine for Nevada teen girls is 54.2%, ranking us 40th in the nation.** Estimated **coverage with at least one (1) dose of HPV vaccine for Nevada teen boys is 43.4%, higher than the national average and ranking us 20th in the nation.** The boys' rate increased by 40% in just one year – we believe the vast majority of this increase is the result of the intensive HPV Vaccine improvement campaign conducted throughout 2014 and into 2015.
    iv. Estimated **coverage with at least three (3) doses of HPV vaccine for Nevada teen girls is 32.5%, ranking us 44th in the nation.** Once again, the best progress was made in the adolescent male population. Estimated **coverage with at least three (3) doses of HPV vaccine for Nevada teen boys is 16%, ranking us 38th in the nation. This rate more than doubled for the male population (from 7% in 2013) and was considered a statistically significant improvement by the CDC.**

c. **Immunization Information System (IIS), aka NV WebIZ** – Nevada legislation mandates that all vaccines administered in the state to any person of any age (except patients who have actively "opted-out") be entered into NV WebIZ. Immunization systems have been proven to help public health agencies during communicable disease outbreaks by providing a reliable data source to track the burden of disease in a population and to help decision-makers know the percentage of their population that are adequately protected against or that could be vulnerable to vaccine preventable diseases.

   i. **HL7 Interface Program:** Since 2012, the NSIP has been working to improve the HL7 infrastructure in Nevada. HL7 messaging helps Nevada providers reduce duplicative data entry by allowing immunization administration messages to be sent to NV WebIZ via the provider's EMR. This is a very important endeavor as it is also connected to CMS Meaningful Use incentives. The ultimate goal is to allow all interested providers to create an HL7 interface with NV WebIZ. This is a very time and staff intensive process, requiring much testing and communication between NSIP staff and provider IT staff before a true connection can be attained.

   ii. **VFC Vaccine Online Ordering Transition:** The NSIP is transitioning the monthly VFC vaccine ordering process to be completely web-based (as opposed to the paper reporting process we currently employ) using NV WebIZ. This makes sense for providers, because they are already required to use the system if they administer vaccines in any capacity. HL7 enrolled providers will have a slightly different process, and trainings have been created for each type of user group. Ultimately, this transition will save both provider staff and NSIP staff time and effort when conducting month-end vaccine inventory reconciliations, which are required in order to receive any additional VFC or CHIP vaccine. The NSIP's ultimate goal is to be using NV WebIZ to support all program functions, including VFC provider oversight and compliance monitoring.