

West Virginia EPI-LOG



Statewide Disease Facts & Comparisons

SPECIAL ISSUE: WWSIIS

The West Virginia Statewide Immunization Information System

What is WWSIIS?

The West Virginia Statewide Immunization Information System (WWSIIS) is a computerized data registry of childhood immunizations. The registry is a tool public and private providers use to ensure that all children are age appropriately immunized. WWSIIS currently receives birth registry data from the West Virginia Division of Health Statistics, Vital Records. Obtaining these records ensures that all children born in West Virginia are in the registry, with births averaging 23,000 each year. WWSIIS also receives data from Medicaid, which assists in the population of the registry with additional data.

Since 1999, all local health departments have been reporting data to the registry on a regular basis. The local health departments administer vaccines to 31 percent of the children each year, while private doctors serve 56 percent. The other 13 percent of the children are vaccinated in primary care centers. Currently, around 230 private providers are enrolled but for the registry to



be successful, all providers throughout the state need to participate.

The registry houses around 170,000 records for six year olds; these children have received approximately 964,000 immunizations. Even though this number of immunizations may seem large, further investigation shows that each child has not received five out of the ten suggested vaccinations.

The WWSIIS staff will be holding trainings throughout the state at regional points and onsite trainings can be scheduled. Technology has enhanced the training capabilities

and in some cases providers can be trained over the Internet. Call 1-877-408-8930 to set up a training in your practice. ✕

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A brief history of WVSIIIS

After carefully conducting a needs assessment with public and private providers in the middle of the 1990's WVSIIIS was launched in August 1999. WVSIIIS was established under the authority of West Virginia State Code 16-3-1, Legislative Rule 64-7-6, which states that the Commissioner of the Bureau for Public Health (BPH) "shall establish and maintain a centralized registry for tracking compliance with nationally recommended immunization schedules and for monitoring vaccine use." This administrative rule requires all immunizations administered to children aged 6 and

under to be reported to WVSIIIS within two weeks of the administration of the vaccine.

Scientific Technologies Corporation (STC) was the vendor selected to develop and implement the software application for providers to use to report immunizations to WVSIIIS. STC has been a wonderful partner to the BPH and continues to work with WVSIIIS to help meet the challenges faced with implementing a statewide immunization registry. The most daunting of those challenges is designing an effective method of collecting immunization administration data from providers, without requiring providers to duplicate data entry. This challenge is made even tougher because of the need to collect the data within data exchange standards as set forth by Health Level 7 (HL7). HL7 guidelines are designed to ensure that all state and territory immunization registries collect and report immunization data in a uniform fashion so that all registries will, in effect, serve as a nationwide immunization registry.



WVSIIIS Staff (left to right) Tim Neely (Project Manager), Terri Jarvis (Information Systems Coordinator), Tim Pauley (Help Desk Analyst), and Jason Mastrangelo (Information Systems Coordinator)

The BPH recognizes that, unfortunately, participation in WVSIIIS is an ongoing challenge for many of West Virginia's immunization providers. However, the BPH is working diligently with the Centers for Disease Control and Prevention (CDC) and STC to develop linkages to billing vendor systems. This will enable providers

to electronically and painlessly transmit immunization data to WVSIIIS within HL7 standards, without duplicate data entry. In the meantime, the BPH greatly appreciates the providers who have agreed to and are already making the effort to report to WVSIIIS out of a desire to improve their immunization coverage rates and improve the state of public health in West Vir-

ginia. The BPH also recognizes the excellent work of the local public health departments, which have been blazing the trail for WVSIIIS to collect data directly from their patient billing systems. ☒

Why does West Virginia need an Immunization Registry?

The primary goal of the state immunization registry is to raise immunization coverage and prevent vaccine preventable disease outbreaks. During the past 20+ years, West Virginia has been successful in immunizing over 95% of its schoolchildren. However, the immunization coverage of preschool children remains a challenge. The low level of immunizations has been reflected in recent years in outbreaks of measles among un-immu-

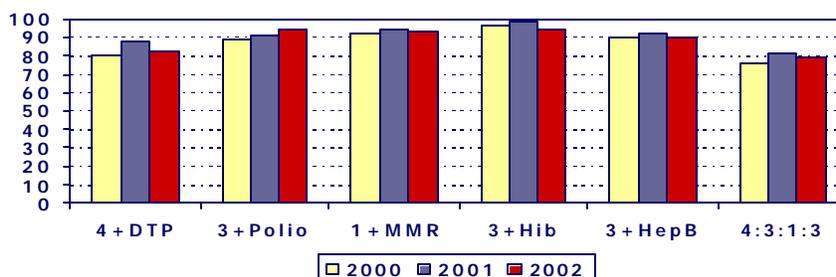
(See Registry, page 3)

(Registry, continued from page 2)

nized preschool children. The resurgence of measles in 1989 through 1991 afflicted over 55,000 people and cost the country \$20 million in avoidable hospital costs alone.

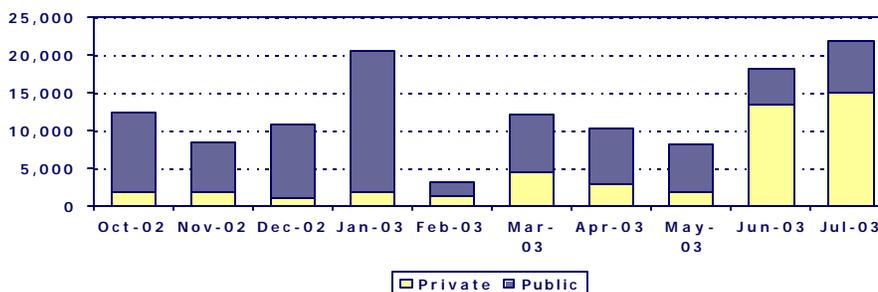
The measles outbreak between 1989-91, which resulted in over 130 deaths (predominately in young children), was a wake-up call that something was wrong with the country’s vaccine delivery system to preschoolers. By the time they reach 24 months of age, children should have received 80% of the required vaccine doses. Unfortunately, many children do not receive their basic immunizations by that time. **National surveys indicate over 22% of the nation’s and 21% of West Virginia’s preschool children have not been appropriately immunized by age 2.**

Estimated Vaccination Coverage by 19 - 35 Months



One of the WV Healthy People 2010 Goals is to maintain or increase immunization coverage to at least 90% among children 19-35 months of age for a combination of at least four doses of DTaP, three doses of polio, one dose of measles-mumps-rubella (MMR) and three doses of Haemophilus Influenza type b, abbreviated as 4:3:1:3. According to the National Immunization Survey (NIS), a composite measure of vaccination coverage most recently conducted between January and December of 2002, West Virginia’s immunization coverage levels for children by 19 -35 months of age for the vaccine combination of 4:3:1 and 4:3:1:3 were both about 78% (CDC, National Immunization Survey Q1/2002 – Q4/2002). This does not represent a significant change over the past three years.

Vaccination Records Submitted by Provider Type



In efforts to help reach WV Healthy People 2010 immunization goals, the importance of continued collaboration between the public and private sectors cannot be overstated.

Immunization registries are recommended tools for sustaining high immunization coverage (See *Benefits of WVSIS, page 4*). In the first three years of registry implementation, WVSIS has successfully linked with all of the local health departments. However, participation from just the public health community is not enough to achieve the goals. Approximately 23,000 births occur in West Virginia each year; of these, 38% are immunized in local health departments and 62% in the private sector. With this in mind, WVSIS has intensified the recruitment of private sector immunization providers since the beginning of the year and a sustained increase in private provider participation (note lighter bars in above chart) has occurred. WVSIS has raised participation from three providers at the beginning of the year, to 60 who are actively submitting data as of the end of September 2003. ☒

Benefits of WVSIIS

A Guide for Parents, Patients, Providers, and Communities

Immunization registries are extremely useful for helping to increase immunization coverage in a community. Sharing information among local health care providers and parents will make it easier to check on a child's immunization status. Immunization registries can also be used to enhance adolescent and adult immunization services and coverage. Here are some ways that our immunization registry can benefit parents, providers and communities:

For parents and patients:

- Provides a single source of documentation for all immunizations a child has received. This can assist in keeping the child on schedule when the family moves or changes providers. It can also prevent a child from receiving unnecessary (duplicate) immunizations.
- Generates official immunization record for school, camp and day care requirements.
- Sends notification to parents when an immunization is due or overdue.

For providers:

- Provides easy access to a complete immunization history for any child, whether a new or continuing patient.
- Quickly identifies which shots are due without thumbing through pages of progress notes.
- Eliminates the need to track down immunization histories from the county health department or other physician offices.

*(See **Benefits**, page 2)*



(Benefits, continued from page 4)

- Generates official immunization records for school, camp and day care requirements.
- Assists with practice management.
- Forecasts vaccinations due in a current or upcoming visit.
- Generates postcards or letters when immunizations are due or overdue.
- Helps manage vaccine inventories.
- Generates Vaccines for Children reports.

For public health officials and communities:

- Helps prevent and control disease outbreaks.
- Provides information on community and state coverage rates.
- Assists in identification of high risk and under immunized populations.
- Provides data to drive interventions and evaluate programs.
- Promotes standards of excellence in immunization service delivery.
- Controls costs by streamlining vaccine management.
- Promotes current ACIP immunization recommendations.
- Facilitates introduction of new vaccines or changes in the vaccine schedule.
- Helps monitor vaccine associated adverse events.

The WVSIS can be a great asset in the prevention and control of vaccine preventable diseases. Families, health care providers and communities need and want documentation of childhood immunizations. Nearly 62% of children in West Virginia receive their immunizations in private practitioner offices therefore, the full participation of physicians in private practice is essential to making WVSIS successful. As a health care provider, you are being invited to support our efforts to sustain a state based registry that will help reduce vaccine preventable disease in West Virginia. 

Regional provider meeting a success

The West Virginia Immunization Network (WIN) initiated statewide promotional efforts of the WVSIIIS Registry in September. A series of regional meetings are being held throughout the state with the goal of recruiting additional private providers into the WVSIIIS registry. The meetings also provide CEU/CME credits free of charge to attendees.

The regional outreach, entitled "WV Immunization & Registry Update 2003", began in Beckley with 35 people attending the meeting at Tamarack. Dinner was served and presentations were given by Crystal Welch of WIN, Rose Anne Michaels of Vaccines for Children Program, Jason Mastrangelo of WVSIIIS and by Dr. Raheel Khan spoke on immunizations across the lifespan.

WVSIIIS Information Systems Coordinator, Jason Mastrangelo presented a PowerPoint presentation. He highlighted the history of WVSIIIS, what the registry can do for providers, how the registry works and how

easy it is to enroll into the registry. Jason responded to questions from providers regarding the registry and distributed enrollment packets to private providers.

WIN received grant money from both Glaxo SmithKline and Wyeth Ayerst Vaccines to assist in the development of the meetings for the Vaccines for Children providers. Dr. Raheel Khan, Assistant Professor of Pediatrics, Robert C. Byrd Health Sciences Center of West Virginia University, Charleston Division was the featured speaker. Dr. Khan spoke on the decline of vaccine preventable diseases, the availability of combination vaccines and answered numerous questions pertaining to immunizations.

Regional meetings promoting WVSIIIS have been held in Beckley, Wheeling and Parkersburg. Additional regional meetings are being held in Fairmont, Elkins, Huntington and Charleston in October and November. For more information on the meetings, please call 1-800-642-3634. ☒

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