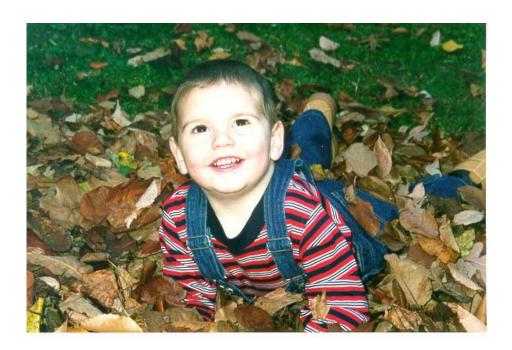
Report and Recommendations

Health Screening of West Virginia Children for Kindergarten Entry In School Year 2004-05



February 2006

Report and Recommendations:

Health Screening of West Virginia Children for Kindergarten Entry In School Year 2004-05

West Virginia
Children's Health Insurance Program

In collaboration with:

West Virginia
Department of Health and Human Resources,
Office of Maternal, Child and Family Health

and

West Virginia Department of Education, Office of Healthy Schools

Executive Summary

The purpose of this report is to evaluate the process of pre-kindergarten health screening as mandated under West Virginia state law and to identify opportunities for improvement.

West Virginia Code, §18-5-17, provides that "all children entering public school for the first time shall be given, prior to their enrollment, screening tests to determine if they have vision or hearing impairments or speech or language disabilities." The Code also states that developmental screens must be given to children with previously identified disabilities or, if requested, by their parents. Developmental screening is defined as the process of measuring the progress of children to determine if there are problems or potential problems or advanced disabilities in the areas of development and hand-eye coordination, health, and psycho-social or physical development."

West Virginia Code, §18-5-22, also addresses dental and medical inspections and the authority of school districts to take action to prevent communicable disease. In addition, West Virginia Code, §16-3-4, provides for immunizations so that "all children entering school for the first time shall have been immunized against diphtheria, polio, rubeola, rubella, tetanus, and whooping cough."

William B. Carey, M.D., of the Children's Hospital of Philadelphia, writing in the journal, "Pediatrics," defines screening as: "The application of a quick, simple, but reasonably accurate test to an asymptomatic population to find those individuals who are likely to have the problem in question. A positive screen leads to a more thorough evaluation at the secondary stage of assessment."

The U.S. Department of Health and Human Services, Administration for Children and Families, defines screening as: "A glimpse of a child's health and developmental status via the use of standardized screening instruments. Screening consists of a brief process using standardized health screening and developmental screening instruments. Screening is used to make judgment(s) about children in order to determine if a referral for further evaluation is necessary. Screening does not lead to a conclusion about whether a child has a developmental or health condition; however, the results of the assessment or evaluation done after the referral may lead to a diagnosis. It is the first opportunity to work together with the parents to learn more about the child and support the parent-child relationship."

Findings and Recommendations

Finding 1: There is no systematic process for documenting, collecting and tracking outcomes related to kindergarten screening. Use of the existing WVEIS program is not universal.

Recommendation 1: In order to assess the degree to which counties are meeting the legal mandates for screening of children, a standardized recording and tracking procedure is needed that assures easy access to relevant information at the school, county, regional and state level. Information on health screens should be available to staff at all levels (e.g. school, county, and state) in a centralized database that enables them to answer key questions, such the percentage of four-year olds screened, the number who had findings requiring further services and the number receiving those services.

Finding 2: Better identification and notification of parents would improve the screening process.

Recommendation 2: Counties should focus on the three most effective methods of notifying parents, which are letters to parents, local newspapers, and word of mouth. A standardized statewide notification

process would assist local officials in making parents aware of the importance of these screenings. Health care insurers should be enlisted to assist in this effort.

Finding 3: There is no consistency or standardization in the content of pre-kindergarten screens. Even though similar screening tools or instruments are used by many of the counties, there is no standardization of the tools or processes.

Recommendation 3: Screening tools and procedures should be standardized to assure consistent quality, facilitate data collection, provide accurate statistical information and enable analysis on the health status of children.

Finding 4: The Early Periodic Screening Diagnosis and Treatment (EPSDT) screening protocol is considered the "gold standard" for preventive care and screening and, if used consistently, could assure high quality health and development screening for all West Virginia children.

Recommendation 4: The EPSDT screening protocol should be adopted for all pre-kindergarten screening to assure high quality screening and to serve as a common basis for screening between school systems and the medical community.

Finding 5: It is difficult to determine who is ultimately responsible for collecting and coordinating the results of screens for each child. There is an apparent division between those children receiving general health screens and those who must receive development screens. This split is reflected in having the general screens performed by school nurses, and all other developmental screens and those required for Individuals with Disabilities in Education Act (IDEA) performed by special education departments and their related personnel.

Recommendation 5: A primary focus point for responsibility for coordination of screenings, documentation of results and tracking of all children with identified deficits needs to be established.

Finding 6: Coordination and collaboration at the local level between individuals and entities involved in assuring the health of West Virginia's children could be improved. Poor coordination causes duplication and places an unnecessary burden on the education system. Poor coordination and lack of collaboration causes school nurses to spend more time in the role of providing direct services rather than acting as case managers, a more appropriate role considering the environment they work in and the high number of students assigned to each of them.

Recommendation 6: The West Virginia Department of Education, Department of Health and Human Resources, Medicaid Program, Children's Health Insurance Program and Public Employees Insurance Agency should engage in coordinated planning efforts leading to the promulgation of policies and technical assistance to local entities that will increase collaboration and reduce duplication.

Finding 7: Without a signed release of information form, school personnel cannot share health information about a child. Family Educational Rights of Privacy Act (FERPA) and Health Insurance Portability and Accountability Act (HIPAA) regulations prohibit such exchange without prior written approval of the parent/guardian.

Recommendation 7: Requiring such permission in advance would allow designated school personnel to follow-up with health care providers and other appropriate parties while allowing the sharing of school health screenings in the interest of a child's health, and would facilitate referral when screening tests identify possible problems.

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STATEMENT OF PURPOSE

The purpose of this report is to describe the results of a 2005 survey on pre-kindergarten health screening as mandated under West Virginia state law. Based on survey results and current child health standards and practices, the report leads to a four-fold discussion:

- 1) How West Virginia's 55 counties are meeting requirements for health screening prior to kindergarten entry as mandated in school law (West Virginia Code, §18-5-17, §18-5-22, and §16-3-4);
- 2) How the quality of screening instruments and methods currently in place in the school setting could be improved;
- 3) The relationship of school health screenings to comprehensive well-child exams as currently recommended by national physician groups, such as the American Academy of Pediatrics and by public health programs; and
- 4) How a more collaborative effort between the educational system and the health care delivery system could improve the quality and efficiency of pre-kindergarten screenings, and how it could create new opportunities to improve the health of West Virginia's children.

Because a growing body of research links early childhood experiences with later cognitive, social, emotional and physical health, improving the quality of preventive health care has taken on a greater emphasis and a new focus. This report is offered to stimulate discussion on improving health screening in West Virginia for all children, a key component of preventive health care.

The impetus for this report grew out of discussions among staff from the West Virginia Department of Education's Office of Healthy Schools, West Virginia Department of Health and Human Resources' Division of Maternal, Child and Family Health, and the West Virginia Children's Health Insurance Program. Representatives of these offices formed a committee to review the survey results, compile the data and finalize the report. Joan Faris, an independent consultant, compiled and analyzed the survey data, and wrote the preliminary drafts.

The authors wish to acknowledge the statewide support received from various individuals, agencies and groups. All school nurses in the regional education service agency known as RESA II piloted the survey. After piloting the survey, changes were made according to substantial feedback from RESA II school nurses. A lead school nurse was designated to complete the survey for each county. The Office of Healthy School's associate staff compiled the data into a file created by the West Virginia Department of Education's Office of Technology. The West Virginia Department of Education's Office of Special Education assisted with missing data related to developmental screenings. As the survey results were compiled into a report with recommendations, the School Based Health Partnership, and the West Virginia Council of School Nurses reviewed the draft for clarity, reliability, validity and feedback on recommendations.

This project could never have been completed without the support of those willing to focus on the health and educational achievement of children. The authors are extremely grateful to everyone who played a role in this step forward into a comprehensive, collaborative and coordinated approach to benefit West Virginia's children.

BACKGROUND/RATIONALE

Current School Law in West Virginia for Health Screening

Upon entering school all states provide for some degree and form of health examination or "screening," as the term is applied in its medical or public health sense. There are obvious benefits to identifying disorders that can impair learning and that require remedial learning, as well as the prevention of disease and contagion.

As stated in West Virginia Code, §18-5-17, West Virginia law provides that "all children entering public school for the first time shall be given, prior to their enrollment, screening tests to determine if they have vision or hearing impairments or speech and language disabilities." This same section of code also states that developmental screens must be given to children entering public school if requested by their parents and to all children with previously identified disabilities. Developmental screening is defined in code as "the process of measuring the progress of children to determine if there are problems or potential problems or advanced disabilities in the areas of development and hand-eye coordination, health, and psycho-social or physical development."

West Virginia Code, §16-3-4, also provides for immunizations so that "all children entering school for the first time shall have been immunized against diphtheria, polio, rubeola, rubella, tetanus, and whooping cough" in order to protect children from serious diseases common in childhood. The full text for these citations can be reviewed in Appendix 1 of this report.

American Academy of Pediatrics Guidelines for Preventive Child Health Care

Physician guidelines call for comprehensive wellness office visits that include age and gender appropriate history and examinations, counseling and anticipatory guidance, risk factor reduction interventions, and the ordering of appropriate immunizations as well as laboratory tests and or diagnostic procedures as necessary. Such preventive health screens are recommended throughout the life span at set intervals or "periods." This periodic screening takes on heightened importance in childhood when the greatest preventive benefit may be realized by intervening at the earliest possible stage. Early detection allows for optimal remedial benefit, including total restoration in some cases.

To this end, the American Academy of Pediatrics (AAP) publishes recommended guidelines detailing the elements and periods of health screens for each year of childhood (Recommendations for Preventive Pediatric Health Care, Committee on Practice and Ambulatory Medcine). A summary chart of these is available as Appendix 2 of this report.

Due to the comprehensive nature of these screens and the time that they take, it is a challenge for most physicians to assure that all their patients receive all the detailed elements at the recommended ages and intervals. For example, the National Survey of Early Childhood Health, conducted in 2000, indicated that only 57% of parents reported their child's development level ever being assessed within a pediatric visit. The process of child health preventive exams and screens has become a topic of discussion and possible revision among pediatricians.

Screening, Assessment and Diagnosis

A continuing source of confusion is the exact meaning of the word "screening." In commentary published in Pediatrics (Vol. 109 No. 2 February 2002, pp. 316-317), William B. Carey, M.D., of the Children's Hospital of Philadelphia, explains the concept of screening in practical and comparative terms:

"By screening, we usually mean the application of a quick, simple, but reasonably accurate test to an asymptomatic population to find those individuals who are likely to have the problem in question. A positive screen leads to a more thorough evaluation at the secondary stage of assessment. However, many of the screening tools listed in that article [also published in Pedatrics] are too long and detailed to be judged primary level screens – for example, the 20- to 30-minute version of the Denver Developmental Screening Test II and the 20-minute Ages and Stages Questionnaire. Other tests, such as the Brazelton Neonatal Behavioral Assessment Scale and the Carey Temperament Scales, are assessments of normal qualitative behavioral variations and are not intended as screens for early evidence of developmental or behavioral abnormality."

"Second, competent screening of development and behavior can be achieved in primary care within the standard 20-minute office visit without extra time or funding by using more suitable methods. The authors appear to assume that formal testing (using a test form) is superior to informal clinical methods, although evidence of a higher yield and better outcome with these forms is hard to find..."

"For developmental screening, the principle of developmental surveillance has deservedly gained in popularity as supporters have demonstrated that frequent formal testing of the general population is not necessary. The informed clinician makes brief ongoing developmental observations of the child during all contacts. At well-child visits, selecting 2 to 3 items expected for the age of the particular child in each of the 4 areas of development (gross motor, fine motor, speech, and personal-social) and evaluating them by history and/or examination has been shown to be a sufficient first-level screen. The skilled general pediatrician can do this well in a few minutes. Because most children are normal, only a small percentage will require the next step of a more extensive assessment."

Another comparison of screening and assessment is found in Early Head Start Tip Sheet No. 6 (published in 2002 and updated in 2003), U.S. Department of Health and Human Services, Administration for Children and Families:

Screening:

"There are simple yet significant differences between screening and assessment. **Screening** [emphasis added] quickly captures a glimpse of a child's health and developmental status via the use of standardized screening instruments. Screening consists of a brief process using standardized health screening and developmental screening instruments. Screening is used to make judgment(s) about children in order to determine if a referral for further evaluation is necessary."

"Screening does not lead to a conclusion about whether a child has a developmental or health condition; however, the results of the assessment or evaluation done after the referral may lead to a diagnosis. It is the first opportunity to work together with the parents to learn more about the child and support the parent-child relationship."

"Assessment [emphasis added] is a continual process that occurs throughout a child's enrollment in EHS [Early Head Start] that tracks the child's developmental progress."

"Ongoing assessment continues throughout the child's enrollment and tracks how the child progresses over time. Ongoing assessment is a process that identifies the child's unique strengths and needs. It is used to determine what skills and information the child has and in what situations the child uses them. The assessment process also considers the next level of skills and information that the child should be acquiring. The assessment process utilizes multiple sources of information on all aspects of each child's development and behavior, including input from families, teachers, and other relevant staff who are familiar with the child's behavior. Ongoing assessment helps support staff in communicating and working with parents and families, planning and tailoring learning experiences (or individualizing the curriculum), and identifying other relevant services.

The Tip Sheet quotes from Performance Standards, Title 45, Code of Federal Regulations: 1304.3(a)(1)(i) & (ii) & 1303.3 (a)(1) **Assessment means the ongoing** [emphasis added] procedures used by appropriate qualified personnel throughout the period of a child's eligibility to identify: (i) The child's unique strengths and needs and the services appropriate to meet those needs: and (ii) The resources, priorities, and concerns of the family and the supports and services necessary to enhance the family's capacity to meet the developmental needs of their child.

West Virginia law calls for pre-kindergarten screening of all children. Adoption of the definitions of screening stated above makes sense in this context, considering 1) the time required for assessment, 2) the number of encounters required for thorough assessment, 3) the number of children to be screened, and 4) the personnel available to screen the children.

Since child health screens are done through the involvement of a variety of professionals both in health and educational settings, it is imperative to reach an established consensus as to the type and level of screenings required prior to kindergarten.

Early Periodic Screening, Diagnosis and Treatment (EPSDT) under Medicaid

Children in impoverished settings have long been shown to be at higher risk for preventable conditions that can be corrected through early detection and prevention. Within a few years of its creation in the 1960's, the Medicaid Program adopted a specialized program to assure that the lowest income children would receive health screenings that met physician-recommended guidelines and treatment needed to remediate adverse health conditions detected. This program was named Early and Periodic Screening, Diagnosis and Treatment (EPSDT). The state program responsible for EPSDT is known as Healthcheck in West Virginia, and it is administered by the Office of Maternal, Child and Family Health within the Department of Health and Human Resources. The Healthcheck (EPSDT) protocol is available for review as Appendix 3 of this report.

Since then, EPSDT has become known as the "gold standard" for preventive child health care. To encourage practitioners to adopt all EPSDT standards, Medicaid currently offers additional reimbursement to participating practitioners who meet all recommended guidelines for well-child screening (with appropriate documentation).

Currently, close to one-half of West Virginia's children are covered by Medicaid. As stated above, it is important for these children to receive high-quality preventive care. However, there are many children in West Virginia who receive health coverage through other sources. There is no evidence or rationale that supports these children receiving health screenings of lesser quality than children receiving Medicaid.

Although their families may be better off economically, a significant percentage of these children also have conditions requiring early identification and treatment. Consistent use of the EPSDT protocol for all well-child screenings would assure that all children receive comprehensive screens in accordance with AAP guidelines.

SURVEY METHODOLOGY

Interest in assessing the process of health screenings of children entering kindergarten, as required by West Virginia Code, developed out of discussions between the State Department of Education/Office of Healthy Schools, school nurses, the State Children's Health Insurance Program (CHIP), and the Division of Infant and Child Health in the State Department of Health and Human Resources/Office of Maternal, Child and Family Health, in August of 2004.

Further input was sought from the West Virginia School Based Health Partnership (SBHP), whose members represent the major health programs serving children in the State. Consensus from this group supported the development and implementation of a survey with the primary purpose of providing a picture of how pre-kindergarten screening is accomplished in the 55 different school districts. Components were included that would indicate the levels of coordination between schools, local health care providers and public health agencies; compliance with legal requirements; and potential areas for reducing duplication and improving the quality of preventive care for the State's youngest school children.

An initial survey form was developed in the fall of 2004 that included questions intended to provide information on these issues:

1. STATISTICS

- Number of children entering kindergarten
- Number of children screened before and after entry
- Number of schools involved

2. ORGANIZATION OF SCREENING PROCESS

- Process of identifying and informing eligible children
- Identifying central responsibility for organization and completion of screening process within the school districts
- Scheduling, number, type of sessions, screening sites

3. SCREENING TOOLS

- What screens are included
- Method/materials used for each screen
- Type of staff who do screens
- Average time required for each screen
- Components of developmental screen
- Number of children receiving developmental screen
- Do all children receive the same screens?
- Reasons all children might not receive same screens

4. HEALTH SCREENS AND HEALTH CHECK [EPSDT]

- Participation in EPSDT
- Familiarity with EPSDT form
- Inclusion of physical exam, immunizations
- Screens provided at grades/ages other than kindergarten

5. REFERRAL AND FOLLOW-UP

- Identify staff who are responsible and methods used for communication with parents
- Process for follow-up
- Communication with health care providers
- Release of information forms
- Sharing of information

6. INFORMATION AND DATA COLLECTION

- Methods of recording and tracking referral and treatment
- Use of State WVEIS system
- Who does data entry?
- Systematic process for recording, maintaining, compiling and reporting on the results of screening activities

7. COMMUNITY RESOURCES

- Who assists with kindergarten screening?
- Medical consultants
- Improving screening process
- Which screens are priority

After further review and input from school nurses and members of the SBHP, a pilot survey was completed in RESA II in December of 2004.

A final survey form was developed using results of the pilot survey and further review and input from the participants. The instrument, consisting of 31 questions, was revised for electronic completion and compilation. However, due to time concerns, the survey forms were distributed for manual completion to the lead school nurse or designee in each of the 55 counties in May of 2005.

The timing of the survey presented some difficulty in that the school year ended in early June leaving a short period for the nurses to complete the survey. Even so, 49 counties, or 89% of the 55 counties were able to complete the survey in the required time. One county had a newly hired lead nurse unable to provide complete information; this is why many items show only 48 responses.

As data was tallied, flaws in the format became apparent.

- It was assumed that the school nurses were the primary participants in the screening process and, as a central focal point, that they would have access to all requested/needed information. We found that this is not the case; special education staff routinely perform the speech and language screens, and this appears to be a quite separate process. Developmental screening is mostly done on request, by special education staff or classroom teachers.
- Statistical information about total numbers of children screened requested in issues 1 and 2 was not always available to the nurses and is not kept at a local or regional level. Those providing this information were obliged to return to individual records and compile this data.
- Numerous questions allowed multiple responses resulting in a more cumbersome process to
 determine rankings and percentages since survey forms were seldom completed in total. In many
 instances, there were fewer than 49 counties responding to a question.

As a result of finding that special education staff generally perform developmental screens, either based on a request or as part of determining eligibility under the Individuals with Disabilities in Education Act (IDEA), the Office of Healthy Schools met with selected special education staff who subsequently surveyed their counterparts statewide. Results of this survey are included as Appendix 4 and addressed in the discussion and recommendation section of this report.

Information on the number and type of referrals resulting from kindergarten surveys was not available. However, it should be noted that this is a retrospective compilation of data that only occurs every other year. Data is available through the 2005 School Nurse Needs Assessment which includes information on total screens and referrals for K-12 statewide (see Appendix 6).

Findings, Discussion and Recommendations

This survey has provided valuable information for assessing the pre-kindergarten screening process across the state. The most pertinent findings are highlighted below by section.

Section One: Screening Data and Reporting

Information on the number of children who should have been screened, the number actually screened, and number of kindergarten classes was incomplete. This was due, for the most part, to the absence of any centralized data and reporting both at the local and state levels. It was evident that those responding to this survey were not in a position to fully answer the questions in this section.

This lack of information indicates that there is no systematic process for documenting, collecting and tracking outcomes related to the pre-kindergarten screening process. It is, therefore, difficult to determine how effective current efforts are in meeting the school law.

Discussion/Recommendations

Information on health screens should be available to staff at all levels (e.g. school, county, and state) in a centralized database that enables them to answer key questions such as the percentage of four-year olds screened, the number who had findings requiring further services and the number receiving those services. An effective data and reporting system will enable staff at all levels to answer these questions:

- What percent of the total eligible four-year olds are actually screened each year?
- What percent were screened prior to entry into kindergarten?
- What percent were screened after entry into kindergarten?
- How many children were found to have positive findings [by total number of screens and by each type of screen]?
- What percent of children with positive findings were referred to a physician or other specialist for further assessment or diagnosis?
- Of the total referrals made, what percentage had a confirmed visit with a physician/specialist?
- Of the total confirmed visits, what percentage reported assessment results from the physician/specialist for inclusion into their school health record?

Section Two: Screening Process Organization

Counties reported a variety of methods for notifying families, organizing and scheduling pre-kindergarten screens.

The top three most effective methods for notifying families were:

- Letters to Parents (35%)
- Local Newspapers (20%)
- Word of Mouth (17%)

Individual appointments were used by 63% of the counties to schedule children. Others used "first come, first serve," group or "other" types of appointments.

In developing this survey process, there was an assumption that screenings were generally carried out by school nurses. Unexpectedly, we found that responsibility for organizing and conducting the screening process was shared with special education teachers [24%], school nurses [23%], school administrators [17%], speech and language staff [14%], teachers and aids [7%], and "Others" [14%].

Forty-two percent of the schools provided one screening session per school with a kindergarten classroom; 27% used multiple sites for screening.

Discussion/Recommendations

Methods of scheduling and location of screening vary by geographic area and the populations to be served. While one size would not fit all, responses to question 31 in section seven indicate that better identification and notification of parents would improve the screening process.

To improve parental response to the screening process:

- Counties should focus on the three most effective methods of notifying parents.
- In addition, a standardized statewide notification process would assist local officials in making parents aware of the importance of these screenings. Health care insurers, a valuable partner in this effort, have indicated interest in assisting in the distribution of such notifications.

Section Three: Screening Tools

Responses to the questions in this section reveal the use of multiple tools, some differences in which screens were provided, and the involvement of a number of different participants to provide the screens.

Developmental and dental screenings were not universally provided; 24 counties provided developmental and 28 counties provided dental. Immunizations were checked by reviewing records, and in several instances, responses indicated that staff had developed their own screening tools.

Vision Screening:

Forty-eight of the forty-nine responders included vision screens in the protocol.

Five different tools for vision screening were identified, while 9% of the respondents used something other than those listed.

Nurses performed vision screening in 43 of the counties. "Other" was indicated as the screener by the remaining 6 counties.

Average time for vision screening was 5 to 10 minutes.

Hearing Screening:

Forty-five counties included hearing screens.

Three different tools were identified for hearing screens; none indicated use of "Other" tools. Speech therapists provided hearing screens in 34 counties, school nurses in 8 and "Other" in 13 counties. Average time for hearing screens was 10 to 15 minutes.

Speech and Language Screening:

Forty-six of the counties included speech and language in the screening process.

Two tools were identified for speech and language screening, but 50% of the responders did not use either of these tools.

Speech therapists provided this screening in 45 counties, 2 counties indicated "Other" as provider. Average time for speech and language screens was 10-15 minutes.

Developmental Screening:

Twenty-four counties included developmental screens.

One tool was identified for developmental, but 93% did not use this tool.

Pre-kindergarten teachers, Head Start Staff and "Others" were identified as providers.

Average time was 10 minutes to over 15 minutes.

Dental Screening:

Twenty-eight counties included dental screens.

Fifteen counties used school nurses, 10 used a dental hygienist, 3 used "Other" and 2 used a dentist to complete dental screens.

Seventy-one percent of the responders used the same tool for dental screening.

Average time for dental was less than 5 minutes.

<u>Immunizations</u> [Checking for; not administration of]:

Immunization checks were included in 42 of the counties.

Immunizations were based on two named sources and only 2% used "Other."

School nurses complete immunization screens in 41 counties, public health nurses in 4 counties, and 7 counties indicated "Other."

Average time for immunization checks was less than 5 to 10 minutes.

Reasons why all children did not receive the same screens included: information or a screen from the health provider, parental refusal, complicated conditions and referral for special evaluation. Fourteen counties indicated "Other" reasons.

Discussion/recommendations

Responses to this section raise a number of issues.

There is an apparent lack of consistency statewide in the content of pre-kindergarten screens. Even though similar tools are used by many of the counties, there is no standardization of tools or processes.

Information on how many children needed referrals or had problems identified, what referrals were made and the results is not readily available.

It is also difficult to determine who is ultimately responsible for collecting and coordinating the results of these screens for each child. It is difficult to determine who is ultimately responsible for collecting and coordinating the results of screens for each child. There is an apparent division between those children receiving general health screens and those who must receive developmental screens. This split is reflected in having the general screens performed by school nurses, and all other developmental screens and those required for IDEA performed by the special education departments and their related personnel. Responsibility for a central focal point for coordination of screenings, documentation of results and tracking of children with identified deficits needs to be established.

Standardization of screening tools, procedures, and practitioners would assure consistent quality, facilitate data collection, provide accurate statistical information and enable analysis on the health status of children.

Section Four: Health Screens Related to EPSDT [Health Check]

Based on the responses to this section, knowledge about and/or participation in EPSDT is limited. Fourteen responders indicated that the county participates in EPSDT through a school based health center, primary care center or by other means. Sixteen counties had seen the current EPSDT form, 4 had used it and 30 were not familiar with the form. (Please see Appendix 3 for Healthcheck form for 4 year-old children.)

Physical exams were included in the pre-kindergarten screening process in only 5 counties.

Immunizations were provided as part of the screening process in 5 counties.

Screens, including vision, hearing, speech/language, developmental, immunizations, dental, blood pressure, scoliosis, and height/weight may be administered at other ages or grades. However, they are not provided consistently across the state.

Discussion/Recommendations

The EPSDT screening protocol is considered the "gold standard" for preventive care and screening and, if used consistently, could assure high quality health and development screening for all West Virginia children. Also, screening of children would be improved with greater collaboration with local health care providers. Such collaboration could reduce duplication, allow for more efficient use of resources and provide more comprehensive health information on children. Therefore, the EPSDT screening protocol should be adopted for all pre-kindergarten screening to assure high quality screening and to serve as a common basis for screening between school systems and the medical community.

In addition, utilization of information from the State Immunization Directory and the State Immunization Program could improve the accuracy and efficiency of immunization checks. The Immunization Directory should be used when feasible.

Section Five: Screening, Referral and Follow-up

Responses to this section indicate that referral is largely the responsibility of "whoever identifies the problem," with the school nurse, the speech and hearing staff and clerical staff also responsible.

Parents/guardians are notified of the need for referral and follow-up at the screening site, by letter, by phone or, in some instances, by home visit.

Forty-three counties indicated they have a follow-up process if parents do not respond to the initial notification. This was most often accomplished by letter or phone.

Communication with health care providers is seen as the parents' responsibility. Only 11 responses indicated that the school nurse or other parties were responsible.

Only 17 counties obtained a release of information form that would allow sharing of health information between the school and other appropriate individuals or entities.

School nurses, other school staff and "Others" are responsible for follow-up to assure that further diagnosis or treatment is received. Time between notification and follow-up ranged from less than a month to more than 3 months.

Results of screening and follow-up are available to teachers and special education and language staff 43-47% of the time. Other staff has information available only 10% of the time.

Discussion/Recommendations

Responders were unable to provide information on the number of children requiring referrals, indicating the need for a standardized data collection system that would provide information on who was screened, the results, referrals, special visits, further treatment and results. Fixing responsibility for a standardized process of documentation, notification, follow-up and coordination of health information would improve the overall process, the efficiency of health screenings and the tracking of children with health problems.

Coordination and collaboration at the local level between individuals and entities involved in assuring the health of West Virginia's children could be improved. Poor coordination causes duplication and places an unnecessary burden on the education system. Poor coordination and lack of collaboration causes school nurses to spend more time in the role of providing direct services rather than acting as case managers, a more appropriate role considering the environment they work in and the high number of students assigned to each of them. The West Virginia Department of Education, Department of Health and Human Resources, Medicaid Program, Children's Health Insurance Program and Public Employees Insurance Agency should engage in coordinated planning efforts leading to the promulgation of policies and technical assistance to local entities that will increase collaboration and reduce duplication.

Without a signed release of information form, school personnel cannot share health information about a child. Family Educational Rights of Privacy Act (FERPA) and Health Insurance Portability and Accountability Act (HIPAA) regulations prohibit such exchange without prior written approval of the parent/guardian. Requiring such permission in advance would allow designated school personnel to follow-up with health care providers and other appropriate parties while allowing the sharing of school health screenings in the interest of a child's health, and facilitate referral when screening tests identify possible problems.

Section Six: Information, Data Collection and Reporting

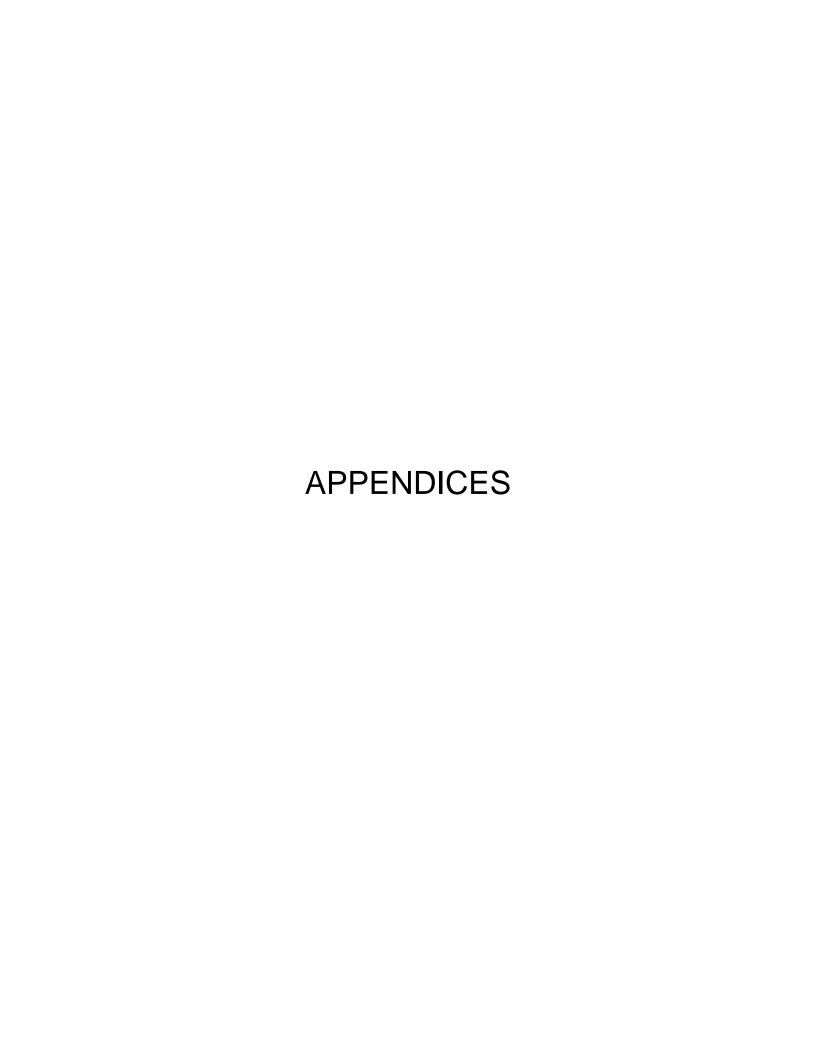
Most counties indicated that they use the individual child's health record to document and track referral and treatment information. Fewer than half reported use of the state computer system WVEIS for statewide reporting.

Screening information is entered into WVEIS by 38 of the counties responding. School nurses entered the data in 28 counties, along with clerical staff, administrative staff and teachers/counselors in other instances.

Discussion/Recommendations

Results indicate that there is no systematic process for recording or tracking health screening information, follow-up on referrals and further diagnosis and treatment. Use of the existing WVEIS program is not universal.

In order to assess the degree to how effectively counties are meeting the legal mandates for screening of children a standardized recording and tracking procedure is needed that assures easy access to relevant information at the school, county, regional and state level. Information on health screens should be available to staff at all levels (e.g. school, county, and state) in centralized database that enables them to answer key questions such as the percentage of four-year olds screened, the number who had findings requiring further services and the number receiving those services.



Appendix 1

WV Code - School Enrollment Screening References

§18-5-17. Compulsory preenrollment hearing, vision and speech and language testing; developmental screening for children under compulsory school age.

- (a) All children entering public school for the first time in this state shall be given prior to their enrollments screening tests to determine if they might have vision or hearing impairments or speech and language disabilities. County boards of education may provide, upon request, such screening tests to all children entering nonpublic school. County boards of education shall conduct these screening tests for all children through the use of trained personnel. Parents or guardians of children who are found to have vision or hearing impairments or speech and language disabilities shall be notified of the results of these tests and advised that further diagnosis and treatment of the impairments or disabilities by qualified professional personnel is recommended.
- (b) County boards of education shall provide or contract with appropriate health agencies to provide, upon the request of a parent or guardian residing within the district, developmental screening for their child or children under compulsory school attendance age: Provided, That a county board is not required to provide such screening to the same child more than once in any one school year. Developmental screening is the process of measuring the progress of children to determine if there are problems or potential problems or advanced abilities in the areas of understanding language, perception through sight, perception through hearing, motor development and hand-eye coordination, health, and psychosocial or physical development. The boards shall coordinate the provision of developmental screening with other public agencies and the interagency plan for exceptional children under section eight, article twenty of this chapter to avoid the duplication of services and to facilitate the referral of children and their parents or guardians who need other services. The county boards shall provide notice to the public of the availability of these services.
- (c) The state board of education is hereby authorized to promulgate rules consistent with this section. The state superintendent is directed to apply for federal funds, if available, for the implementation of the requirements of this section.

§18-5-22. Medical and dental inspection; school nurses; specialized health procedures; establishment of council of school nurses.

- (a) County boards shall provide proper medical and dental inspections for all pupils attending the schools of their county and have the authority to take any other action necessary to protect the pupils from infectious diseases, including the authority to require from all school personnel employed in their county, certificates of good health and of physical fitness.
- (b) Each county board shall employ full time at least one school nurse for every one thousand five hundred kindergarten through seventh grade pupils in net enrollment or major fraction thereof: *Provided,* That each county shall employ full time at least one school nurse: *Provided, however,* That a county board may contract with a public health department for services considered equivalent to those required by this section in accordance with a plan to be approved by the state board: *Provided further,* That the state board shall promulgate rules requiring the employment of school nurses in excess of the number required by this section to ensure adequate provision of services to severely handicapped pupils.

- (c) Any person employed as a school nurse must be a registered professional nurse properly licensed by the West Virginia board of examiners for registered professional nurses in accordance with article seven, chapter thirty of this code.
- (d) Specialized health procedures that require the skill, knowledge and judgment of a licensed health professional, may be performed only by school nurses, other licensed school health care providers as provided for in this section, or school employees who have been trained and retrained every two years who are subject to the supervision and approval by school nurses. After assessing the health status of the individual student, a school nurse, in collaboration with the student's physician, parents and in some instances an individualized education program team, may delegate certain health care procedures to a school employee who shall be trained pursuant to this section, considered competent, have consultation with, and be monitored or supervised by the school nurse: *Provided*, That nothing in this section prohibits any school employee from providing specialized health procedures or any other prudent action to aid any person who is in acute physical distress or requires emergency assistance. For the purposes of this section "specialized health procedures" means, but is not limited to, catheterization, suctioning of tracheostomy, naso-gastric tube feeding or gastrostomy tube feeding. "School employee" means "teachers", as defined in section one, article one of this chapter and "aides", as defined in section eight, article four, chapter eighteen-a of this code. Commencing with the school year beginning on the first day of July, two thousand two, "school employee" also means "secretary I", "secretary II" and "secretary III", as defined in section eight, article four, chapter eighteen-a of this code: Provided, however, That a "secretary I", "secretary II" and "secretary III" shall be limited to the dispensing of medications.
- (e) Any school service employee who elects, or is required by this section, to undergo training or retraining to provide, in the manner specified in this section, the specialized health care procedures for those students for which the selection has been approved by both the principal and the county board, shall receive additional pay of at least one pay grade higher than the highest pay grade for which the employee is paid: *Provided*, That any training required in this section may be considered in lieu of required in-service training of the school employee and a school employee may not be required to elect to undergo the training or retraining: *Provided*, *however*, That commencing with the first day of July, one thousand nine hundred eighty-nine any newly employed school employee in the field of special education is required to undergo the training and retraining as provided for in this section: *Provided further*, That if an employee who holds a class title of an aide is employed in a school and the aide has received the training, pursuant to this section, then an employee in the field of special education is not required to perform the specialized health care procedures.
- (f) Each county school nurse, as designated and defined by this section, shall perform a needs assessment. These nurses shall meet on the basis of the area served by their regional educational service agency, prepare recommendations and elect a representative to serve on the council of school nurses established under this section.
- (g) There shall be a council of school nurses which shall be convened by the state board of education. This council shall prepare a procedural manual and shall provide recommendations regarding a training course to the commissioner of the bureau for public health who shall consult with the state department of education. The commissioner then has the authority to promulgate a rule in accordance with the provisions of article three, chapter twenty-nine-a of this code, to implement the training and to create standards used by those school nurses and school employees performing specialized health procedures. The council shall meet every two years to review the certification and training program regarding school employees.

(h) The state board of education shall work in conjunction with county boards to provide training and retraining every two years as recommended by the council of school nurses and implemented by the rule promulgated by the commissioner.

§16-3-4. Compulsory immunization of school children; information disseminated; offenses; penalties.

Whenever a resident birth occurs, the state director of health shall promptly provide parents of the newborn child with information on immunizations mandated by this state or required for admission to a public school in this state.

All children entering school for the first time in this state shall have been immunized against diphtheria, polio, rubeola, rubella, tetanus and whooping cough. Any person who cannot give satisfactory proof of having been immunized previously or a certificate from a reputable physician showing that an immunization for any or all diphtheria, polio, rubeola, rubella, tetanus and whooping cough is impossible or improper or sufficient reason why any or all immunizations should not be done, shall be immunized for diphtheria, polio, rubeola, rubella, tetanus and whooping cough prior to being admitted in any of the schools in the state. No child or person shall be admitted or received in any of the schools of the state until he or she has been immunized as hereinafter provided or produces a certificate from a reputable physician showing that an immunization for diphtheria, polio, rubeola, rubella, tetanus and whooping cough has been done or is impossible or improper or other sufficient reason why such immunizations have not been done. Any teacher having information concerning any person who attempts to enter school for the first time without having been immunized against diphtheria, polio, rubeola, rubella, tetanus and whooping cough shall report the names of all such persons to the county health officer. It shall be the duty of the health officer in counties having a full-time health officer to see that such persons are immunized before entering school: **Provided**, That persons enrolling from schools outside of the state may be provisionally enrolled under minimum criteria established by the director of the department of health so that the person's immunization may be completed while missing a minimum amount of school: Provided, however, That no person shall be allowed to enter school without at least one dose of each required vaccine.

In counties where there is no full-time health officer or district health officer, the county commission or municipal council shall appoint competent physicians to do the immunizations and fix their compensation. County health departments shall furnish the biologicals for this immunization free of charge.

Health officers and physicians who shall do this immunization work shall give to all persons and children a certificate free of charge showing that they have been immunized against diphtheria, polio, rubeola, rubella, tetanus and whooping cough, or he or she may give the certificate to any person or child whom he or she knows to have been immunized against diphtheria, polio, rubeola, rubella, tetanus and whooping cough. If any physician shall give any person a false certificate of immunization against diphtheria, polio, rubeola, rubella, tetanus and whooping cough, he or she shall be guilty of a misdemeanor, and, upon conviction, shall be fined not less than twenty-five nor more than one hundred dollars.

Any parent or guardian who refuses to permit his or her child to be immunized against diphtheria, polio, rubeola, rubella, tetanus and whooping cough, who cannot give satisfactory proof that the child or person has been immunized against diphtheria, polio, rubeola, rubella, tetanus and whooping cough previously, or a certificate from a reputable physician showing that immunization for any or all is impossible or improper, or sufficient reason why any or all immunizations should not be done, shall be guilty of a misdemeanor, and except as herein otherwise provided, shall, upon conviction, be punished by a fine of not less than ten nor more than fifty dollars for each offense.

Recommendations for Preventive Pediatric Health Care (RE9535)

Committee on Practice and Ambulatory Medicine

Each child and family is unique; therefore, these Recommendations for Preventive Pediatric Health Care are designed for the care of children who are receiving competent parenting, have no manifestations of any important health problems, and are growing and developing in satisfactory fashion. Additional visits may become necessary if circumstances suggest variations from normal.

These guidelines represent a consensus by the Committee on Practice and Ambulatory Medicine in consultation with national committees and sections of the American Academy of Pediatrics. The Committee emphasizes the great importance of continuity of care in comprehensive health supervision and the need to avoid fragmentation of care.

			11	NFANC	Y*					۱ ا	EARLY	CHILD	ноог	*	MID	DLE CI	HILDH	OOD4					ADO	LESCE	NCE*				
AGE ⁵	PRENATAL1	NEWBORN ²	2-4d ³	By 1mo	2mo	4mo	6mo	9mo	12mo	15mo	18mo	24mo	Зу	4y	5y	6y	8y	10y	11y	12y	13y	14y	15y	16y	17y	18y	19y	20y	21
HISTORY Initial/Interval																									•				
MEASUREMENTS Height and Weight Head Circumference Blood Pressure		:	:	:	:	:	:	:	:	:	:	:	•	:	:	:			:	:	:	•	:	:	:	:	:		:
SENSORY SCREENING Vision Hearing		s o'	s	s	s	s	s	s	s	s	s	s s	o ^s	0	0	0	0	0	s	0	s	s	0	s	s	0	s	s	S
DEVELOPMENTAL/ BEHAVIORAL ASSESSMENT®		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
PHYSICAL EXAMINATION®																					•		•						
PROCEDURES-GENERAL ¹⁹ Hereditary/Metabolic Screening ¹¹ Immunization ¹² Hematocrit or Hemoglobin ¹³ Urinallysis			:	►.				:	·	:			•	•							•	•	•	-15	•	•	•		
PROCEDURES-PATIENTS AT RISK Lead Screening ¹⁶ Tuberculin Test ¹⁷ Cholesterol Screening ¹⁸ STD Screening ¹⁸ Pelvic Exam ²⁰								•	*	*		:	:	*	:	:	:	:	:	:	:	:	:	:	****	* * *	* * * * * * * * * * * * * * * * * * * *	:	
ANTICIPATORY GUIDANCE ²¹ Injury Prevention ²² Violence Prevention ²³ Sleep Positioning Counseling ³⁴ Nutrition Counseling ³⁴			:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	
DENTAL REFERRAL™									-				•																

- Every intant should have a newborn evaluation after birth. Breastleeding should be encouraged and instruction and support offered. Every breastleeding infant should have an evaluation 48-72 hors after discharge from the hospital to include weight, formal breastleeding evaluation, encouragement, and instruction as recommended in the AAP statement. Breastleeding and the Use of Human Milk* (1997).
- For newborns discharged in less than 48 hours after delivery per AAP statement "Hospital Stay for Healthy Term Newborns" (1995).
- Developmental, psychosocial, and chronic disease issues for children and adolescents may require frequent counseling and treatment visits separate from preventive care visits.
- If a child comes under care for the first time at any point on the schedule, or if any items are not accomplished at the suggested age, the schedule should be brought up to date at the earliest possible time.
- 6. If the patient is uncooperative, rescreen within 6 months.

Key: • = to be performed

S = subjective, by history

- All newborns should be screened per the AAP Task Force on Newborn and Infant Hearing statement, "Newborn and Infant Hearing Loss: Detection and Intervention" (1999).
- By history and appropriate physical examination: if suspicious, by specific objective developmental testing.

 Parenting skills should be fostered at every visit.

 the range during which a service may be provided, with the dot indicating the preferred age.

* = to be performed for patients at risk

O = objective, by a standard testing method

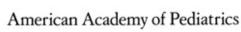
- At each visit, a complete physical examination is essential, with infant totally unclothed, older child undressed and suitably draped.
- 10. These may be modified, depending upon entry point into schedule and individual need.
- Metabolic screening (eg. thyroid, hemoglobinopathies, PKU, galactosemia) should be done according to state law.
- Schedule(s) per the Committee on Infectious Diseases, published annually in the January edition of Pediatrics. Every visit should be an opportunity to update and complete a child's immunizations.
- See AAP Pediatric Nutrition Handbook (1998) for a discussion of universal and selective screening options.
 Consider earlier screening for high-risk infants (eg. premature infants and low birth weight infants). See also "Recommendations to Prevent and Control Iron Deficiency in the United States. MMWR. 1998;47 (RR-3:11-29).
- 14. All menstruating adolescents should be screened annually.
- 15. Conduct dipatick urinalysis for leukocytes annually for sexually active male and female adolescents.
- For children at risk of lead exposure consult the AAP statement "Screening for Elevated Blood Levels" (1998). Additionally, screening should be done in accordance with state law where applicable
- 17. TB testing per recommendations of the Committee on Infectious Diseases, published in the current edition of Red Book: Report of the Committee on Infectious Diseases. Testing should be done upon recognition of high-risk factors.

- Cholesterol screening for high-risk patients per AAP statement "Cholesterol in Childhood" (1998).
 If family history cannot be ascertained and other risk factors are present, screening should be at the discretion of the physician.
- All sexually active patients should be screened for sexually transmitted diseases (STDs).
- All sexually active females should have a pelvic examination. A pelvic examination and routine pap smear should be offered as part of preventive health maintenance between the ages of 18 and 21 years.
- Age-appropriate discussion and counseling should be an integral part of each visit for care per the AAP Guidelines for Health Supervision III (1998);
 From birth to age 12, refer to the AAP injury prevention program (TIPP*) as described in A Guide to Safety
- Counseling in Office Practice (1994).

 23 Violence researches and management for all nations per AAP Statement The Bole of the Perfection in
- Violence prevention and management for all patients per AAP Statement "The Role of the Pediatrician in Youth Violence Prevention in Clinical Practice and at the Community Level" (1999).
- Parents and caregivers should be advised to place healthy intents on their backs when putting them to sleep. Side positioning is a reasonable alternative but carries a slightly higher risk of SIDS. Consult the AAP statement "Positioning and Sudden Intent Death Syndrome (SIDS): Update" (1996).
- Age-appropriate nutrition counseling should be an integral part of each visit per the AAP Handbook of Nutrition (1996).
- Earlier initial dental examinations may be appropriate for some children. Subsequent examinations as prescribed by dentist.

NII: Special chemical, immunologic, and endocrine testing is usually carried out upon specific indications. Testing other than newborn (eg. inborn errors of metabolism, sickle disease, etc) is discretionary with the physician.

The recommendations in this statement do not indicate an exclusive course of treatment or standard of medical care. Variations, taking into account individual circumstances, may be appropriate. Copyright 01999 by the American Academy of Pediatrics. No part of this statement may be reproduced in any form or by any reases without prior writtine permission from the American Academy of Pediatrics except for one copy for personal use.







West Virginia HealthCheck Program PREVENTIVE HEALTH SCREEN

4 yrs

NAMEDOB	AGESEXWGTHGT	_BPSCREEN DATE
ALLERGIES	CURRENT MEDS	
HISTORY	CURRENT HEALTH INDICATORS (CONTINUED)	ANTICIPATORY GUIDANCE/HEALTH EDUCATION (CONT)
Concerns and questions	☐ Hops, jumps on 1 foot	□ Limit high fat snacks □ Feeds self
	□ Rides tricycle or bicycle with training wheels	□ Variable appetite □ Limit sweets
Follow up on previous concerns	☐ Throws ball overhand	□ Dental/oral care □ Elimination □ Sleep
	Fine Motor:	Development/Behavior:
□ See Initial History □ No change	□ Draws a person with 3 parts	□ Social □ Motor skills
□ Interval History Change	□ Builds a tower of 10 blocks	□ Communication □ Set limits
	□ Uses utensils	□ Physical □ Discipline/time out
SOCIAL/FAMILY HISTORY	□ Puts on/removes clothes	□ Cognitive skills □ Health/safe habits
□ See Initial History □ No change	☐ Manual dexterity	□ Family relationship
□ Interval History Change	Communication:	Injury Prevention:
Family Situation No change	□ Uses past tense	□ Auto/car seat/booster □ No shaking
Parents working outside home	□ Sentences of 4-5 words, short paragraphs	□ Poisons □ Burns
Child care □ Yes □ No □ Type Preschool □ Yes □ No □ Type	☐ Talks about daily experience	□ Falls □ Smoke detector
Preschool	□ May show some lack of fluency (stuttering)	□ Lighters/matches □ Water heater
Changes since last visit □ Yes □ No	□ Speaks intelligibly	□ Electrical outlets □ Fire retardant
	Cognitive:	□ Choking clothes
	□ Concept of "same" and "different"	□ Sharp objects □ Sun
CURRENT HEALTH INDICATORS	□ Follows 2-3 step instructions	□ Water □ Stoves/heaters
□ See Initial History □ No change	☐ Knows difference between fantasy and reality	□ Guns □ Playground safety
□ Interval History Change	☐ Knows about things used at home (food, appliances)	□ Helmet/protective gear
Nutrition Eating Habits	Is aware of gender of self and others	PLAN
·	☐ Gives first and last name	Immunizations (see Vaccine Administration Record) □ UTD
Vitamins/Fluoride	Social:	Labs ☐ Hgb/Hct ☐ Blood Lead Level if child has not had one
Source of Water	□ Engages in elaborate fantasy play	□ PPD if 1 or more risk factors
Elimination 🗆 NL	☐ Plays interactive games with peers	□ Other
Sieep INL	□ Listens to stories	
Behavior NL	□ Can sing a song	REFERRALS
Toxic Exposure	☐ Vision Acuity Screen (objective) RightLeft	Development
Passive Smoking □ Yes □ No	☐ Hearing Screen (objective) RightLeft	☐ One delay -re-evaluate in 1 month
Lead Risk ☐ High Risk ☐ Low Risk		□ Two or more delays - Referred to:
☐ Lives in or regularly visits a house/ child care facility	PHYSICAL EXAMINATION	
built before 1970 or that has been recently remodeled?	√ =NL	
☐ Lives near a heavily traveled highway or battery recycling	□ General Appearance □ Skin	□ Blood lead level 10>
plant or lives with an adult whose job or hobby involves	□ Head	□ Dentist
exposure to lead?	□ Eyes □ Red Reflex □ Strabismus	□ Vision 20/40>
☐ Has a sibling or playmate who has or did have lead	□ Ears □ External □ Internal	□ Hearing <20 dB @ each frequency
poisoning?	□ Mouth □ Throat □ Nose	□ Further Medical Treatment/Diagnosis - Referred to :
Tuberculosis Risk □ High Risk □ Low Risk	□ Lungs	
□ Exposure to TB	□ Heart	
□ Radiographic or clinical findings	□ Abdomen	FOLLOW UP /NEXT VISIT:
☐ Immigrant from areas with high prevalence	□ Genitalia □ Male □ Female	
□ Residence/travel in area with high prevalence	□ Extremities □ Back	
□ Homelessness	□ Femoral pulses RightLeft	Please Print Facility or Clinician Name
□ HIV infection or living with person who has HIV	□ Neurological	
□ Other medical risk factors	Abnormal findings/comments	
Development S Platted as assetts about	ANTIQUEATORY OF THE ANGENIES AND THE STATE OF	Oliver Army of Olivinia
□ Growth □ Plotted on growth chart	ANTICIPATORY GUIDANCE/HEALTH EDUCATION	Signature of Clinician
Gross Motor:	□ Discussed □ Handouts given	MANDINID/PRIMOMOTIVILO DE LOS
□ Walks, climbs, runs	Nutrition: Low fat dairy Food groups	WVDHHR/BPH/OMCFH/HC/HC-4Y 4-04 (A-1/
□ Up/down stairs alternating feet, without support	□ 3 balanced meals/day □ 2-3 snacks/day	



SURVEY INSTRUMENT WITH AGGREGATE DATA RESULTS

KEY TO ABBREVIATIONS USED ON SURVEY SCORING

- [55] = Total number of counties responding to this question reflected in brackets just below each question
- n = Total responses to all items in each question
- % = Number of responses to this one item shown as percentage of total responses to question
- R = Rank order of number of responses per each item with #1 being the highest number of responses
- NA = % or Ranking does not apply

A WEST VIRGINIA SURVEY FOR HEALTH SCREENING OF CHILDREN DURING KINDERGARTEN ENTRY IN 2004-2005

PURPOSE

This is a survey to collect data and information about health screens and health activities for children entering kindergarten in each of West Virginia's 55 counties. Your county responses will assist State and local planners to develop plans which improve children's access to health services, reduce duplication of effort and ensure utilization of best practices to better meet the health needs of West Virginia children.

SURVEY INFORMATION		
County:	RESA:	
Individual completing this survey:		
Name:		-
Title:		_
Phone Number To Best Reach You:		
Email (if available):		

INSTRUCTIONS

(Estimated Completion Time: 45 Minutes)

- 1. Complete each survey item by checking the appropriate item or items.
- 2. If you cannot answer some questions, (for example, on developmental screens), please identify the department and staff person that has this information (for example, Special Education, Ms. Jones), and the question numbers they must address.

Rebecca J. King
Department of Education
Office of Student Services

Phone: 304-558-8830

Email: riking@access.k12.wv.us

THANK YOU VERY MUCH FOR YOUR PARTICIPATION!

When the survey results are completed, your county will receive a compilation report for all 55 counties.

How Many Children Were Screened in Each County?

Q. 1 How many children in your county were screened for Kindergarten entry in school year 2004-05?

[45]		76 n	NA%
	1.1	12,320	Spring
	1.2	4,152	Fall
	1.3	732	Rescreens & retainees
	1.4	17,204	Total

Q. 2 Identify the number of separate schools that have Kindergarten classes in your county and the number of children screened for entrance at each one in 2004-05.

[44]	4	14	NA	
	2.1	379		Number of separate schools
	2.2	525	762	Number of children per school
	2.3	902	120	Average children per school
	2.4	107		Average number of separate schools per county

ORGANIZING THE SCREENING PROCESS

Q. 3a How do you identify the children that are due to enter Kindergarten and inform parents of the screening schedule prior to kindergarten entry?

[48]		230 n	R	R (fo	r 3b below)
	3a.1	48	1	2	Local newspapers
	3a.2	21	5	0	Radio
	3a.3	42	3	3	Word of mouth
	3a.4	38	4	5	Flyers/posters
	3a.5	45	2	1	Letters to parents of Head Start, pre-school and elementary school children
	3a.6	18	6	4	Notice via community message boards
	3a.7	11	7	0	School board meetings
	3a.8	6	8	6	Others

Q. 3b In your opinion, which of the above methods, has been shown most effective for identifying eligible children?

[37]

3b.1 See ranking of responses in 3a ABOVE

Q. 4 How do you schedule children for pre-Kindergarten screening?

[41]		49 n	R	
	4.1	31	1	Individual appointment
	4.2	15	2	First come, first serve based on general information as to time, date and place
	4.3	1	4	Group scheduling by age or alphabet
	4.4	3	3	Other

Q. 5 Who in your county was responsible for scheduling and conducting the Kindergarten screening for school year 2004-05?

[47]		86 n	R	
	5.1	15	3	School Administrator
	5.2	20	2	School Nurse
	5.3	12	4	Speech/Language staff
	5.4	21	1	Special Education Director/staff
	5.5	6	6	Teacher/aide
	5.6	12	5	Other

Q. 6 How many kindergarten screening sessions were held in school year 2004-05?

[49]		66 n	NA	
	6.1	6		1 of the whole county
	6.2	28		1 for each school with a Kindergarten
	6.3	18		Multiple sites
	6.4	14		Multiple times

Q. 7 How many different sites were used for screening sessions?

[48]		49 n	R	
	7.1	14	2	0-3
	7.2	8	3	3-5
	7.3	27	1	5 or more

SCREENING TOOLS AND HOW USED

Q. 8 Which screens are included in the Kindergarten screening process?

[48]		233 n	R	
	8.1	48	1	Vision
	8.2	45	3	Hearing
	8.3	46	2	Speech/Language
	8.4	24	6	Developmental
	8.5	28	5	Dental
	8.6	42	4	Immunizations

Q. 9	Identify by name or title the method/materials your county uses to perform each type of
	screen.

9.1 Vision

[48]		67 n	R	
	a.	22		Titmus
	b.	13	3	LEA symbol
	C.	14	2	Random DOT E
	d.	7	4	Handchart by Goodlite
	e.	5	5	Keystone VS11
	f.	6	6	none of the above

9.2 Hearing

[48]		52 n	R	
	a.	13	2	Earscan Audiometer
	b.	4	3	Maico
	C.	35	1	Audiometer/Tympanometry
	d.	0	4	none of the above

9.3 Speech/Language

[48]		40 n	R	
	a.	9	3	Speech-ease
	b.	11	2	Fluharty
	C.	20	1	none of these

9.4 Developmental

[48]		30 n	R	
	a. b.	2 28	2 1	Fluharty +BDI none of these
9.5	Dental			
[48]		35 n	R	
	a. b.	25 10	1 2	Visualization none of these

[48]	46 n R			
	a. 11 2 b. 34 1 c. 1 3	List from Sc Public Healt not included		
Q. 10	On average how long do	oes it take to	complete each screen per child?	
[48]		224 r	n	
	10.2 Hearing a 10.3 Speech/Language a 10.4 Developmental a 10.5 Dental a	a. <5 min 11 a. <5 min 4	b. <10 min 22 c. 10 -15 min 7 d. >15 min 3 b. <10 min 18 c. 10 -15 min 14 d. >15 min 6 b. <10 min 5 c. 10 -15 min 12 d. >15 min 9 b. <10 min 1 c. 10 -15 min 1 d. >15 min	2 2 6 9 1
	10.2 Hearing 1 10.3 Speech/Language 1 10.4 Developmental 1 10.5 Dental 1	. <10 min . <10 min . <10 min . <10 min . 10-15 min . <5 min . <5 min	2. <5 min	
Q. 11	Who administers each ty	ype of screer	n? (Identify by title: School Nurse, Teacher etc.)	
[49]		279 n	R	
	11.1 Vision	a. 43 b. 9	1 School Nurse 2 Other	
	11.2 Hearing	a. 8b. 34c. 13	3 School Nurse1 Speech Therapist2 Other	
	11.3 Speech/Language	e a. 45 b. 2	1 Speech Therapist 2 Other	
	11.4 Developmental	a. 7 b. 19 c. 17	 3 HeadStart Staff 1 Pre-Kindergarten Teacher 2 Other 	
	11.5 Dental	a. 15 b. 2 c. 10 d. 3	 1 School Nurse 4 Dentist 2 Dental Hygienist 3 Other 	
	11.6 Immunizations	a. 41 b. 4 c. 7	1 School Nurse3 Public Health Nurse2 Other	

9.6

Immunizations

Q. 12a What components do your Developmental Screens include?

	103 n	R	
12.1	4	5	Physical exam
12.2	23	3	Gross Motor Skills
12.3	27	1	Fine Motor Skills
12.4	27	1	Cognitive
12.5	18	4	Social /Emotional
12.6	4	6	All of above
	12.2 12.3 12.4 12.5	12.1 4 12.2 23 12.3 27 12.4 27 12.5 18	12.2 23 3 12.3 27 1 12.4 27 1 12.5 18 4

Q.12b How many children received Developmental Screens in 2004-05?

(For additional data concerning Development Screens, please see Appendix 5 for data provided through Special Education department in counties shown reporting.)

[26] n=NA

Q. 13a Did all children receive the same number and type of screens?

[47]			n		%		n		%
	13a.1 Vision	a.	41	yes	97%	b.	6	no	13%
	13a.2 Hearing	a.	41	yes	87%	b.	4	no	9%
	13a.3 Speech/Language	a.	44	yes	96%	b.	2	no	4%
	13a.4 Developmental	a.	19	yes	70%	b.	8	no	30%
	13a.5 Dental	a.	22	yes	81%	b.	5	no	19%
	13a.6 Immunizations	a.	40	yes	95%	b.	2	no	5%

Q.13b For a no response on any of above screens, specify if the reason for the exception was:

[47]		31 n	R	
	13b.1	3	3	Accepted documentation from a health care provider that screen was given
	13b.2	1	6	Parental refusal
	13b.3	8	2	Complicated condition, difficult to assess
	13b.4	2	4	Referred for special evaluation
	13b.5	2	5	Accepted screen provided by other Health Care Provider
	13b.6	14	1	Other

HEALTH SCREENS RELATED TO EPSDT (HEALTHCHECK)

Q.14a Does your county participate in EPSDT in any way?

```
[47] 47 n %
14a.1 14 30% Yes
14a.2 33 70% No
```

Q.14b If yes, then:

[13]		47 n	R	
	14b.1	7	2	Through School Based Health Center
	14b.2	6	3	Through local Primary Care Center
	14b.3	34	1	Other

Q.15 Has your county seen or used the Health Check form?

Q.16 Is a physical exam, [head to toe assessment such as Health Check] included in the Kindergarten screening process?

Q.17 If needed are immunizations provided on site as part of the Kindergarten screening process?

Q.18 Which of the following screens are regularly completed at grades other than for Kindergarten entry? (For more data concerning these screens, please see Appendix 6.)

[46]		254 n	R	
	18.1	44	1	Vision
	18.2	37	2	Hearing
	18.3	30	4	Speech/Language
	18.4	9	10	Developmental
	18.5	27	5	Immunizations
	18.6	22	7	Dental
	18.7	18	8	Blood Pressure

18.8	10	9	TB/PPD
18.9	35	3	Scoliosis
18.10	25	6	Height/Weight

REFERRAL AND FOLLOW-UP

Q.19 Who is responsible for communicating the need for further testing and/or treatment to parents?

[46]		85 n	R	
	19.1	26	2	School Nurse
	19.2	20	3	Speech /Hearing Staff
	19.3	7	4	Clerical Staff
	19.4	32	1	Whoever identifies the deficit

Q.20 How are communications in Question 19 accomplished?

[48]		115 n	R	
	20.1	26	3	Phone
	20.2	38	2	Letter
	20.3	43	1	Face to Face
	20.4	8	4	Home Visit [when there is no response to 19.1-19.3]
	20.5	1	5	Other [specify]

Q.21 Do you have a process for follow-up with parents who do not respond to initial communications?

[48]		21 n		%	n		%
	21.1	43	Yes	91%	4	No	9%

Please describe:

	102 n	R	
21.2	4	6	No process
21.3	3 7	1	Letter
21.4	33	2	Phone
21.5	12	3	Home Visit
21.6	11	4	Certified Letter
21.7	7	5	Notification about Medical Neglect
21.8	2	7	Other

Q.22	Who is responsible for communicating screening information to the child's healthcare provider?					
[44]		55 n	%			
	22.1	44	80%	Parent		
	22.2	7	13%	School Nurse		
	22.3	4	7%	Other		
Q.23				tion form routinely obtained and kept on file to facilitate sharing with appropriate others?		
[47]		47 n	%			
	23.1	17	36%	Yes		
	23.2	30	64%	No		
Q.24		s respon orovided		following-up to assure that further diagnosis and treatment have		
[48]		69 n	%			
	24.1	36	52%	School Nurse		
	24.2	22	32%	Other School Staff		
	24.3	11	16%	Other		
Q.25	How lo	ong afte	r notifica	ation of the child's deficit is follow-up completed?		
[44]		51 n	%			
	25.1	9	18%	Less than 1 month		
	25.2	22	43%	1 to 3 months		
	25.3	10	20%	More than 3 months		
	25.4	10	20%	Other		
Q.26				ens, follow-up testing and/or treatment made available to		
	appro	priate so	hool per	rsonnel?		
[46]		92 n	%			
	26.1	43	47%	Teachers		
	26.2	40	43%	Special Education/Speech and Language personnel		
	26.3	9	10%	Other (specify)		

INFORMATION AND DATA COLLECTION

Q.27 How does the county record or track follow-up referral and treatment?

[46]		62 n	%	
	27.1	26	42%	Child's Health Record
	27.2	20	32%	WVEIS
	27.3	5	8%	Data System specific to the county or school
	27.4	11	18%	Other

Q.28 Does your county enter any screening information into the Department of Education's WVEIS System? If so, who does this?

[46]		46 n	%				
	28.1	38	83%	Yes			
	28.2	8	17%	No			
				58 n %		n %	
	28.3	Entered	by: a.	28 48%	School Nurse	b. 6 10%	Administrative Staff
			c.	20 34%	Clerical Staff	d. 4 7%	Teacher/Counselor

COMMUNITY RESOURCES

Q.29 What agencies/individuals regularly assist school personnel with the Kindergarten screening process?

[47]		n	R	
	29.1	15	2	Local Health Departments
	29.2	6	4	RESA Staff
	29.3	4	6	Extension Services
	29.4	5	5	Starting Points
	29.5	10	3	Head Start
	29.6	3	7	School Based Health Centers
	29.7	18	1	Other

Q.30 Does your county have a Medical Consultant arrangement with a physician?

Q.31	Of the following,	what changes could in	prove Kindergarten Screening process?

[34]		43 n	R	
	31.1	11	3	Change time of year closer to entry
	31.2	3	4	Number of sites for screening
	31.3	12	2	Collaboration with other health care providers
	31.4	17	1	Better identification of total child enrollees and notification of parents

Q.32 Which screens do you see as a priority need? [Check all that apply]

[48] 61 n R

32.1.	44	1	Vision
32.2.	43	2	Hearing
32.3.	39	3	Speech/Language
32.4.	30	6	Developmental
32.5.	39	3	Immunizations
32.6.	35	5	Dental
32.7.	21	6	Physical (head to toe) by physician

Developmental Screening

Counties	Screening Tools	Eligibility Tools	Who Is Doing the Screening
(1) Barbour			
(2) Berkeley	CDC Website Tool	Developmental Profile II, Goldman Fristoe, and Preschool Language Scale IV	PERC Staff, Assistant Director of Special Education, special education teacher volunteers, SLP=s and Head Start Staff
(3) Boone	Jolitte Speech/Language Screen/First Step	Battelle Dev. Inventory (2 nd edition)/Goldman-Fristoe Test of Articulation/Receptive One Word Picture Vocabulary Test/Preschool Language Scale 3/Observation/Parent Interview/PT Evaluaitn/OT Evaluation	Speech/Language Pathologistzs//Physical Therapists/Occupational Terapist/Preschool Teacher/BD Evalutaors/School Psychologists
(4) Braxton	Battelle/Fluharty/Impeda nce Auduiometer	Battelle/Fluharty???	Preschool Teacher/Speech Path/school nurse
(5) Brooke	Title 1/Hearing/Speech/Vision	First Step Screening Test for Evaluating Preschoolers/Denver and Peabody Developmental Motor Scales Learning Accomplishment Profile/Stanford- Brnet/Burks= Behavior Rating Scale/Conners Rating Scale/Preschool language Scale/Arizona or Goldman Fristoe test of articulation	Title 1 Teacher Speech Therapist Health Nurse Psychologist Preschool Teacher
(6) Cabell	Batelle Dev. Inventory		Family Connection (Teachers)
(7) Calhoun	Kendergarten not screened, 90-95% previously screened	Eligibility DIAL III	None
	Titmus Vision	Bayley/WISC Vineland/PDMS-	School nurse/RESA Audiologist/School

Counties	Screening Tools	Eligibility Tools	Who Is Doing the Screening
(8) Clay	Screening/Puretone and impedence/Brigance/Brigance	2/Doctor's Report/Occupational Reports/Goldman Fristoe/Arizona/Utah/TO LD	Therapist
(9) Doddridge	Peabody & LAP (revised addition)		Judy Robinson
(10) Fayette	Screen DIAL and Speech ease	Battelle	school system coordinates the Kiddie Fair-Round-Up Screening
(11) Gilmer	DIAL 3 Language Scale		Pre-School Teacher Speech Therapist
(12) Grant	LAPD		Pre-School Teacher
(13) Greenbrier	Made up version from a variety of resources. Hearing screening (tympanometry & pure tone), vision (the nurses use an instrument specifically made for young children but can=t recall naem), cognitive/fine motor/gross motor *using items taken from the LAP, Early LAP, etc.) And speechlanguage (using some items from the Fluharty and some from the Speech-Ease).	DAYC, the Developmental Profile, the LAP/E-LAP, speech- language assessment instruments, medical reports, reports from BTT when available	Special Education Director works in conjunction with our Head School Nurse and our Director of Elementary Education to schedule our screening/registration day(s). Includes BTT staff when we can get them, but primarily utilize our school nurses, preschool teachers, and speech-language pathologists to actually perform the screening.
(14) Hampshire	DIAL R		Pre-School Team
(15) Hancock	DIAL-R	Full Battery/Kaufman Brief Intelligence Test, Second Edition (K- Bit2)/Wechsler Preschool/Primary Scale of Intelligence-3rd edition WPPSI-III WIAT-II Abbreviated/Young Children=s Achievement Test/YCAT)/Bracken Basic Concept Scale- Revised/Vineland	Special Education Department/Coordinates child find activities/school Psychologist Preschool teacher educational specialist/autism coordinator/nurse/speech language therapist

Counties	Screening Tools	Eligibility Tools	Who Is Doing the Screening	
		Adaptive Behavior Scale/PRN: Columbia Mental Maturity Scale/Behavior Assessment System/Gilliam Autism Rating Scale Asperger Syndrome Scale		
(16) Hardy	Informal Speech/Language Sample/Informal observation to note mobility/movement/seper ation from parent	Arizona Articulation Proficiency Scale/Preschool Language Scale/Peadboby Picture Vocabulary Scale/Observation/Language Sample/Batell Developmental WICSIII	Speech Terapist/Diagnostician/T eachers	
(17) Harrison	Dial and curriculum based information for student who have participated in preschool	Battelle Development Inventory	Teachers	
(18) Jackson	Two separate one for Kindergarten and preschool. Kindergarten: informal observation, parent interview. Speech therapists use the DIAL III for their part of K screening as they do with PS, and complete hearing, vision, dental, etc.	Batelle Developmental Inventory (BDI), sometimes the Mullen Developmental Scales or the Portage Guide to Early Education Checklist. Speech therapists use the Arizona Articulation Scale, the Preschool Language Scale (PLS), the Goldman Fristoe, and the TELD (Test of Early Language Development).	Kindergarten Screening, K teachers, speech therapists, and school nurses	
(19) Jefferson	Denver II	Col (child development inventory/Battelle Developmental inventory School psychologist speech therapist, preschool teacher		
(20) Kanawha	Wilcox Johnson 3 KIEA2	Divided with Lead Education Specialist (contact Sandra Ball		
(21) Lewis	Brigance	Batelle Development Inventory; speech- language tools - PPVT, TOLD Pre-K teachers, preschool special need teachers, and SLPs		
		PPVT, TOLD, Goldman, Arizona, Battelle, WPPSI	Speech Pathologist, preschool teachers,	

Counties	Screening Tools	Eligibility Tools	Who Is Doing the Screening	
(22) Lincoln	Battelle Fluharty		Headstart	
(23) Logan	Speech-Ease Screening Inventory (k-1) kindergarten speech & language/Brigance Inventory early development/child find/Hawaii Early Learners Profile Audiometric Screening & Titrnus ?Vision Testing	Instruments vary depending on weaknesses identified during screening. For preschool special needs the psychologist used developmental profile DPII, ABAS Scale-2 and other academic batteries to establish standard scores to determine eligibility for services	speech/language pathologists, preschool educators, school nurses/psychologists/eval uators, developmental specialists from birth to three	
(24) Marion	Pure Tones & Tympanograms/Peek-A- Boo Cards used with the Keystone vision machine/Goldman Fristo & Fluharty Tests/Denver Developmental Screening	Battelle Developmental Inventory Screening/Speech PLS Test	Preschool teacher nurses vision specialists speech therapists audiologist head start or WIC Health Department	
(25) Marshall	Brigance Speech EASE	DIAL3 for 3 year olds LAP/D for 4 year olds Battelle	Kindergarten Teachers Speech Therapist	
(26) Mason	Battelle Developmental Inventory screening/assessment speech language, hearing and vision	Vision hearing speech and language	Kindergarten teachers health department nurses speech pathologist	
(27) Mercer	No current developmental screen/child find for kindergarten age children			
(28) Mineral	Battelle/Stanford		Disa Mikula School Psychologist	
(29) Mingo	LAP (If referred)		Pre-School Special Needs Teacher	
(30) Monongalia	ESI		Classroom Teachers	
(31) Monroe	Brigance		Pre-School Special Needs Teacher	
(32) Morgan	Brigance		Pre-School Special Needs Teacher & Speech Therapist	

Counties	Screening Tools	Eligibility Tools	Who Is Doing the Screening
(33) McDowell	Health Assessment with the parent		Jane Sparks School Nurse
(34) Nicholas	Fluherty for Speech/pure tone hearing/vision screen with machine/dental screening/developmental screen	Batelle/Denver (HeadStart) PLS, Formal Artric test, ROWPVT,SICD, Non Speech test	Speech Pathologists/School Nurse
(35) Ohio	Denver 2 (Pre-School Handicapped)		2 Pre-School Teachers Physical Therapist Speech Therapist Occupational Therapist
(36) Pendleton	Bailey Infant Scales McCarthey		Diana Smith
(37) Pleasants	Dial		Team of Pre-School Psychologists Evaluation
(38) Pocahontas	LVM – out for the Week Janet Stephens		
(39) Preston	Talked with Kathy George and emailed 9/28/05		
(40) Putnam	Battelle		Pre-School Team Special needs Teacher Hearing Specialist Curriculum Specialist Speech Therapist
(41) Raleigh	1) They have developmental screening, ages and stages Questionnaire (Bricker & Squire are the author) 2) Battelle Developmental Inventory. 3) Peabody Development Motor Scales 4) Hawaii Early Learning Profile		Therapists are: Sarah Burkes Klaye Lilly Cindy Ringle- Williams
(42) Randolph	LVM Spec. Ed. Ext. 23		
(43) Ritchie	1) Batelle 2) Dial		Teachers that teach Pre- School. Teachers that teach Kindergarten
	DSTA – for Speech		All the Pre-K Collaborative Team

Counties	Screening Tools	Eligibility Tools	Who Is Doing the Screening
(44) Roane	Battelle		
(45) Summers	LVM Spec. Ed.		
(46) Taylor	DIAL 3	For regular preschool students, there is no eligibility assessment/Preschool special needs Braken and Vineland Communication Assessment and LDP	Regular Education teachers/SLPs
(47) Tucker	DIAL	BDI along with parent inverview/speech language evaluation/variety of evaluations from Birth to Three	Kidergarten staff/speech therapists, school nurse/administration OT/PT
(48) Tyler	Battelle/DIAL 3	Battelle	School Psychologist/Title 1/Kindergarten/Speech Pathologist/Preschool Special Needs Teacher
(49) Upshur	BDI (brigance 2) New Version – 3-4yrs. old and +Dial 3 BDI 2 (new)		Pre-School Needs Teachers School Psychologist – Natalie Feola she does Gross Motor Speech Therapist does Vision
(50) Wayne	LVM Della Rhine, ext. 348		
(51) Webster	LVM Spec. Ed. Ext. 120		
(52) Wetzel	LVM Spec. Ed. Ext. 23		
(53) Wirt	Battelle		Pre-School Teacher
(54) Wood	LVM		
(55) Wyoming Katie Stump	Titmus Impedance Audiometer Puretone, EM Scan Audio Metro Teachers made Speech Screening DIAL —		Pre-School Teacher Pre-School Specialist

Data for Other Screens Indicated in Response to Questions 18: "What screens are regularly provided at grades other than pre-Kindergarten?"

Screening Procedure	*Total # Students Screened	Frequency Ranking for Type Of Screen	*Total # Students Referred	Referrals as % of Screens
Blood Pressure	18,247	8	949	5.2%
Dental	20,073	6	3,074	15.3%
Height/Weight	22,056	5	833	3.8%
Body Mass Index (BMI)	9,936	9	1,197	12.0%
Hearing	19,725	7	877	4.4%
Scoliosis	23,023	4	807	3.5%
Vision	59,255	3	6,863	11.6%
Cholesterol	9,258	10	989	10.6%
Lice Checks	71,394	1	12,030	16.9%
Immunizations	67,094	2	8,017	11.9%

The data in the first and third columns above is reported through West Virginia's School Nurse Needs Assessment 2005 and is summarized for this report. The second and fourth columns were calculated for this table.