



School-Based Health Technical Assistance and Evaluation Center

Robert C. Byrd Center for Rural Health
1600 Medical Center Drive, Suite 1400
Huntington, WV 25701-3655
(304) 691-1192 Fax: (304) 691-1183

**Report of Survey
School-Based Dental Services in West Virginia
2006-2007**

Prepared by Linda Anderson, MPH
The West Virginia School Health Technical Assistance and Evaluation Center
Marshall University
With funding from the Claude Worthington Benedum Foundation

For more information contact Linda Anderson: landerson@marshall.edu

Survey Results
School-Based Dental Services in West Virginia
2006-2007

Purpose: A survey of school nurses and school based health centers (SBHCs) was conducted from June – August 2007. The purposes were:

- 1) To gain a better understanding of the extent of school-based dental services in WV; and
- 2) To gather opinions regarding dental health needs of students and school based dental services.

Method: In June, 2007, participants at the School Health Services conference were asked to complete the survey and return it during the conference. About 80 surveys were returned. The survey was also placed on www.surveymonkey.com and the WVDE Coordinator of Health Services sent an e - mail message to all school nurses, urging those who had not completed the survey to do so. Concurrently, school based health centers received an e mail message from the survey coordinator, inviting them to complete the survey online. Over the summer, the school nurses in counties that had not responded received two follow up e mail requests.

Respondents first answered questions about dental health services provided in their county during that school year, 2006-2007. They were asked to estimate the number of schools and the number of children receiving particular types of dental services. After describing the services, respondents were asked for their opinion on issues related to access and priorities for school based dental services in their counties. Data were analyzed using the various reports available at www.surveymonkey.com. The final draft of the report was sent back to the school nurses and SBHCs for review prior to release.

Results: One hundred thirty seven responses were received, representing 48 out of 55 counties. Eighty- five of the respondents were school nurses from 46 different counties. This represents about one-third of the 256 certified school nurses in WV. The rest of the responses were from SBHC staff or “other” which usually meant a primary care center administrator. The seven counties not represented in this report are Doddridge, Gilmer, Lewis, Mason, Roane, Summers and Tyler.

Findings: Table 1 summarizes the information about services in each county. Attachment 1 is a profile for each county based on information from the surveys and follow up correspondence with school nurses. It should be noted that while a county may report certain services, the services often are limited to a single school or a particular grade and that the information may be incomplete.

1.The majority of school- based dental services in WV are provided by school nurses and are limited to classroom education, screenings, assessments, fluoride rinse/ tablets, and referrals. Nine counties report that their only services are referral to dentists for children referred to the school nurse by a teacher. These counties are Putnam, Preston, Monroe, Braxton, Hancock, Wetzel, Randolph, Upshur and Taylor. (Putnam County has services at the Vocational School but just for the students attending that program.)

2. Very few counties have any school based treatment services (sealants, varnish, exams by dentists, or restorative care). Nine counties offer sealants but at least three of those served fewer than 50 students. Four counties have varnish programs and seven counties provide any restorative care.

3. Five counties appear to have fairly comprehensive school based dental services (arbitrarily defined as sealants, exams, and restorations). For three of them - Ritchie, Fayette, and Calhoun – services are provided through the school based health centers. Kanawha and Ohio counties work with their local dental associations to provide services to children meeting certain income criteria.

4. Ninety- nine percent of respondents indicated that dental care is extremely or somewhat needed. When asked their opinions regarding access, need, and importance:

- 93% of respondents said that over 20 % of their students have difficulty getting needed care;
- 63% knew of no one in their communities who provided sealants, restorative care, or exams to children without insurance or who cannot afford care;
- The three most common barriers to care were perceived to be lack of money/insurance; parent perception that dental care is not important; and few dentists who will accept Medicaid.

5. The majority of respondents identified school based screening and dental clinics as high priorities for promoting dental health among children. As for appropriate dental health activities in schools, the following options were recommended by at sixty percent of the respondents: annual dental screenings (86%), referral to dentists (80%), treatment services in school based clinics (61%), mouth guard protection programs and fluoride rinse programs. Surprisingly, only 44% selected sealant programs. School based sealant programs are highly recommended as a cost effective public health preventive measure. It may be that respondents are not knowledgeable about this.

Tables 2-8 display the responses to these questions. For the most part, there were no significant differences between the opinions of school nurses and SBHC/Others.

Discussion

This survey was a first attempt at getting a statewide picture of school based dental services. Although it is not a scientifically selected representative sample, it does provide useful information about the dental needs of school age children in 48 counties in West Virginia. Not only did respondents voice the tremendous need for better and more dental care for children; they also are willing to support this cause, as evidenced by 81 % who said they would be willing to help with developing school based services in their community.

Based on the comments from the surveys, there appears to be some confusion in terminology among school nurses with regard to what they are “allowed “to do. Some nurses indicate that they are doing assessments; others say they are screening; some say they are no longer allowed

to do either; and others used the term “inspections”. In December, 2006 the WV Council of School Nurses issued a revised statement regarding their recommendations for the role and scope of school nurses with regard to dental assessments. This may have resulted in some confusion that needs further clarification.

Conclusions and Recommendations: The respondents to this survey reinforce the notion that access to dental services is a serious problem in West Virginia. They also support expansion of school based dental clinics and requiring dental exams at school entry. Based on the survey results, consideration should be given to:

1. Clarification of the role and scope of practice for school nurses: see attached recommendation from Council of School Nurses.
2. Hiring of registered dental hygienists by county school systems: Three school systems (Ohio, Monongalia, and Kanawha) reported that they employ registered dental hygienists. They also have some of the stronger dental programs. This model should be considered as one way to strengthen local capacity for developing partnerships with the local dental community. Funding of shared position(s) at the RESA level might also be considered.
3. Strengthening the relationship and coordination between the OMCFH- funded hygienists, school systems, and the private dental community: Opportunities to use these hygienists for more than classroom education should be considered. For example, the community hygienists’ role should include leadership in coordinating a school based dental services program involving community dentists.
4. Development of recommendations and mechanisms to encourage private dentists to volunteer in their schools;
5. Addressing the issue of Medicaid reimbursement;
6. Design and promotion of model school based dental services, including sealant programs, in all counties;
7. Policies requiring dental exams and identification of “dental homes” at school entry and/or certain grades.
8. Technical assistance to communities/wellness councils for developing their school based oral health services programs.

Table 1
School Based Dental Services by County, 2006-2007

COUNTY	SCREENINGS	ASSESSMENTS	REFERRALS	FLUORIDE	VARNISH	SEALANTS	EXAMS	RESTORATIVE
Barbour				X				
Berkley				X				
Boone		X	X	X				
Braxton	No school based services							
Brooke	X	X	X				X	
Cabell	X	X	X				X	
Calhoun	X	X	X	X	X	X	X	X
Clay	X	X	X	X				
Doddridge	Did not respond to survey							
Fayette	X	X	X	X	X	X	X	X
Gilmer	Did not respond to survey							
Grant		X		X				
Greenbrier			X	X				
Hampshire				X				
Hancock	No school based services							
Hardy	X		X	X				
Harrison	X		X					
Jackson	X	X	X	X		X	X	
Jefferson	X	X	X					
Kanawha	X	X	X			X	X	X
Lewis	Did not respond							
Lincoln	X	X	X	X		X	X	
Logan	X		X	X				
McDowell	X	X	X	X				
Marion	X		X					
Marshall	X	X		X	X	X	X	
Mason	Did not respond							
Mercer	X	X		X				
Mineral	X	X	X					
Mingo	X	X	X					
Monongalia	X	X	X	X				
Monroe	No school based services							
Morgan	X		X	X				
Nicholas	X	X	X					
Ohio	X	X	X	X	X	X	X	X
Pendleton	X			X				
Pleasants		X	X					
Pocahontas		X	X					
Preston	No school based services							
Putnam	No school based services							
Raleigh	X		X				X	
Randolph	None other than referrals		X					
Ritchie	X	X	X	X		X	X	X
Roane	Did not respond							
Summers	X	X						
Taylor			X					
Tucker	X		X				X	
Tyler	Did not respond							
Upshur	No school based services							
Wayne	X	X	X	X			X	
Webster			X	X				
Wetzel	No school based services							
Wirt	X							
Wood	X	X	X	X				
Wyoming	X	X	X			X	X	
TOTAL	31	26	33	24	4	9	14	5

Table 2**Q 5. How would you consider the need for access to preventive dental services and dental care among your students?**

	All respondents	School nurse	SBHC and Other
Extremely needed	80.5%	78.3%	85.3%
Somewhat needed	17.3	20.5	8.8
Not a need; services are available	2.3	1.2	5.9

Table 3**Q 6. What percentage of school age children in your schools would you estimate have difficulty obtaining the dental care they need?**

	All respondents	School nurses	SBHCs and Other
Under 20%	6.5%	9.3%	3.0%
20-50 %	59.4	66.7	42.4
Above 50%	34.2	24.0	54.6

Table 4**Q 7. Are you aware of anyone in the community who offers sealants, x rays, or restorative care to children who do not have insurance or cannot afford care?**

	All respondents	School nurses	SBHCs and Other
Yes	37.3%	33.8%	43.3%
No	62.7	66.2	56.7

Table 5**Q 8. For those children who have difficulty obtaining needed dental care, what do you think are the three most frequent barriers?**

Lack of money/inadequate insurance	72.4%
Dental care is low priority/low dental IQ	71
Few dentists who accept Medicaid	57
Transportation	43
Shortage of dentists	23.4
Don't know how or where to obtain care	20.3

Table 6

Q 9. Which dental health promotion activities do you consider appropriate in schools? (Check all that apply)

Annual dental screenings to detect untreated dental disease	85.9%
Referral of students with dental problems to dentists	79.7
Dental treatment services in a school based clinic	60.9
Mouthguard protection in school sports programs	60.9
Fluoride mouth rinse or fluoride tablet program	55.5
Brushing and flossing in the classroom	49.0
Dental sealant program	43.8

Table 7

Q 10. How can WV help to promote better dental health among children? (Check all that apply)

Support school based dental screening and referral programs	81%
Support school based dental clinics for low income children	61
Require dental examinations at school entry	54
Support school based dental sealant programs	37
Support mouth guard programs for students in sports	31.8
Expand community water fluoridation	21.4

Table 8

Q 11. Would you be interested in helping to develop a school based dental program in your county?

	All respondents	School nurse	SBHC and Other
Yes	81%	77%	96%

Attachment 1

County Profile School- Based Dental Health Services in West Virginia 2006-2007

Introduction: Below are brief descriptions of school based dental health services for each county in West Virginia. This is a working document and will be updated as needed. Sources for this information are primarily school nurses and school based health centers who responded to a survey during the summer of 2007. Other sources include the annual data compiled by the WV School Health Technical Assistance and Evaluation Center at Marshall University and information from individual community health center directors and school nurses.

Please note that 1) this information may be incomplete; 2) it does not include descriptions of the classroom education which most of the school nurses and community hygienists provide; and 3) the numbers for students receiving services are estimates provided by respondents.

County - Specific Information

1. Barbour: Fluoride to 370 students grades K-5 by school nurse
2. Berkeley: Fluoride rinse offered to grades 1-5 by school nurses with parent volunteers;
3. Boone: Assessments by school nurses in 15 schools, approx 493 students preK-12; 122 students referred to dentists; 156 rec'd fluoride
4. Braxton: one school nurse reported; no services are provided.
5. Brooke Co: School nurse reports 860 students in 10 schools, Pre K, K, 3rd and 5th grades rec'd screenings, assessments, and referral services; 550 fifth graders in 2 schools had dental exams by two community dentists and a hygienist. In addition, West Liberty State College offers sealants, x rays, and cleanings to children without insurance but it is not a school based program.
6. Cabell: About 400 students were assessed by a community dentist/hygienist; 100 were referred to a dentist for follow up; and the dentist actually completed about 50 exams. The school nurses indicated that few other services were provided by them, other than the screenings at the two SBHCs.
7. Calhoun Co : Minnie Hamilton Health Center operates three school based health centers: Pleasant Hill ES, Calhoun County HS and MS. Oral health services were provided to 35 students by a local dentist using portable equipment at the SBHCs. Services included exams, cleanings, varnish, sealants and restorative work. There were 65 student visits for dental care. One school nurse responded, indicating that the only service provided in other schools was referrals.
8. Clay: Screenings and referrals for about 200 students PS-K, fluoride to 1200 students in five schools grades K-5 by school nurse and community hygienist.
9. Doddridge: No response
10. Fayette: School nurses provide screenings/assessments, referrals; New River Health Association, through their SBHCs, assesses for oral health during well child exams; in

addition they initiated dental services late in the school year with portable equipment, screening about 100 students, and referring to a dentist about 40 students.

11. Gilmer: No response
12. Grant: Screenings, assessments, referral for 460 students; and fluoride to 750.
13. Greenbrier: The school nurses conduct oral assessments on new students (approximately 450); fluoride rinse in 9-10 schools; the two SBHCs at Greenbrier West HS and Western Greenbrier MS High that are operated by Rainelle Medical Center also assess and refer their students.
14. Hampshire: Fluoride in 6 schools K-5, 1500 students.
15. Hancock: Two school nurses reported no services last year.
16. Hardy: Screenings by school nurse to 30 students; fluoride to 600
17. Harrison: screenings referrals, 250 students PreK -12;
18. Jackson County Schools: With portable equipment provided by the Office of Maternal, Child and Family Health and the Division of Primary Care and through coordination by the SBHC staff, a local dentist provided on site services including cleaning, fluoride treatments, and sealants to students in ten Jackson County Schools. 82 students benefited from this service.
19. Jefferson: screenings, assessments, referrals at 3 schools, 750 students;
20. Kanawha: The lead school nurse reports that services were provided to 53 schools last year; approx 18,000 students had the services available; their four School Dental Health Educators, who are all dental hygienists, did inspections on all preschoolers, kindergarteners, 3rd graders and as many 8th graders as they could work in for a total of 11,635 students. Their school based dental clinics offer sealants, exams and restorative care. They also have an agreement with CAMC Dental Clinic and refer students there when they require very extensive work. That is usually only a few students each year. The school based sites see any student who meets income eligibility guidelines. The Kanawha Dental Association volunteers their services every year.
21. Lewis: No response
22. Lincoln: The school nurses report that screenings/assessments, referral and fluoride are provided in their schools. Last year 200 students were screened/ assessed. The school nurses provide fluoride treatments; Valley Health Systems provided other services. VHS reports screening, assessments, referrals, sealants, and exams in 5 schools. About 200 students were served in 06-07 with 100 receiving sealants and 100 referred to a dentist for restorative care. In addition, the three SBHCs operated by Lincoln Primary Care Center, assess for oral health as part of physical exam.
23. Logan: Screenings, referrals , fluoride at several schools, grades Pre-K through 12; by school nurses
24. McDowell County: The new SBHC at Mount View Middle and High Schools provided dental services to 128 students in 265 visits. Dental services included exams, cleaning, x-rays, sealants, as well as restorative treatment for problems identified. Unfortunately, these services are temporarily suspended until a new dentist is recruited. In addition,

- the school nurses report providing screenings/assessments to 4000 students and fluoride to 2300.
25. Marion: The two high school health centers operated by Mon Valley Health Association screen as part of their well child exam; the school nurses conduct kindergarten assessments.
 26. Marshall: Two hygienists employed by the county health department provide services in the schools. A school nurse reported that in one school 370 students had screenings/assessments, 330 fluoride rinse, 250 varnish program, 250 sealants, and 360 had dental exams; (unclear as to whether this program extended to other schools or not.)
 27. Mason: No response
 28. Mercer County: A community dentist/hygienist provided screenings, assessments, referrals and fluoride to about 135 students K-2 last year.
 29. Mineral: The school nurses conduct assessments/screenings and refer to local dentists. Last year, several hundred students at various grade levels were assessed and about 10% were referred.
 30. Mingo: The school nurse reported that she conducted screenings, assessments, and referrals for 500 kindergarten students.
 31. Monongalia: This county has a school employed Registered Dental Hygienist. She reports that last year 3,050 students were screened and assessed in grades Pre-K, K, 2nd, 4th, and 6th. 197 were referred to private dentists, local health departments, and the WVU Dental Clinic. Also, 230 oral health educational programs were provided to 4,160 students. She works closely with 9 school nurses. The hygienist along with parent volunteers provided fluoride to 4,000 students in 20 schools, grades K - 6th.
 32. Monroe: One school nurse responded that there are no services currently but they are planning to implement a program with a local dentist in 07-08.
 33. Morgan: A community dentist/hygienist provides screenings to 1st graders in four schools; last year about 200 students were screened; the school nurse provided fluoride to about 1200 students K- 5th grade and oral health education to 2600 students.
 34. Nicholas: Two school nurses responded to the survey, stating that no services were being provided in their county because “dental screening cannot be done by school nurses”. The SBHC at Summersville MS/HS incorporates screenings and referrals into their well child exams; they report about 100 screenings and 20 referrals last year.
 35. Ohio: This County has a school employed dental hygienist and a school based dental clinic that has operated since 1966. It is available to all children for all dental procedures, including operative, but their priority is those students who are uninsured for dental care. The clinic is sponsored by the Ohio County Board of Education and the Wheeling District Dental Society. Last year 2098 students were assessed; fluoride was provided in 18 schools; 240 students were referred for follow up care; 177 were examined by dentist; restorative care provided to 182 students; and sealants to 141. They schedule about 65 half- day clinics per year. Five to six local dentists rotate through and are paid a stipend. The annual budget for supplies and the dentists’ stipends is

\$10,000; the RDH is paid by the Board of Education, with about ¼ of her salary from the OMCFH Children's Dentistry Program.

In addition to the public schools, the Wheeling Elementary School Based Health Program, recently funded by the Sisters of St Joseph Health and Wellness Foundation, served about 80 students with screenings/assessments, and exams by a volunteer dentist

36. Pendleton: A dentist screened 55 pre- K children at four schools; fluoride was provided by the school nurse to 450 students, grades 1-6, at 3 schools.
37. Pleasants: The school nurse conducted assessments at 4 schools for 50 students; about half of whom were referred to dentists.
38. Pocahontas: The school nurse reports that she observes the need for dental hygiene while doing routine assessment; last year 80 pre K and K level students were assessed at 3 schools; about 15 were referred.
39. Preston: Two of three school nurses replied that no services are available; the other indicated that some services, including varnish, sealants, and restorative care were provided by local dentist but no data were provided as to the number of schools or students served.
40. Putnam: The school nurses reported that the only school based services are at the vocational school. This was not counted as it appears to be only for students in training.
41. Raleigh: This County has had a program for several years that is organized by local dentists and supported by the United Way. Every year, second graders are transported by school bus to the local health department dental clinic. One of the local dentists does an oral exam. Parents are sent the results of the exam and encouraged to make an appointment for follow up. The students also have a lesson from a dental hygienist while at the health department. About 900 second graders receive this service every year.
42. Randolph: One response from a school nurse; no services other than referral to dentists upon teacher referral.
43. Ritchie: Ritchie Primary Care Association recently added dental services to their SBHC serving Ritchie HS and MS. Last year, 75 students received oral evaluations and treatment as needed. Altogether 88 visits were reported; one respondent also mentioned that WVU School of Dentistry and a Dr Spiker participated in Oral Health America, providing exams and sealants through a grant.
44. Roane: There was no response to the survey. However, the Roane Family Health Center CEO reports that they have purchased a mobile unit and intend to use it for dental services for children and pregnant women. They are searching for a dentist.
45. Summers: Summers County provides dental screenings for all students entering the pre-K program. Head Start contracts with a dentist from Huntington who screens their pre-K children and offers a fluoride treatment. Dr. Eckley and Dr. Miller perform a dental and orthodontic screening on all 2nd graders.
46. No response

47. Taylor County: One school nurse reported that she referred three students to a dentist for check up for toothaches.
48. Tucker: one school nurse reported that the nurses provide screenings and referrals in two schools; a dentist provides dental exams; last year 53 students received exams.
49. Tyler: No response.
50. Upshur: No services reported other than classroom education.
51. Wayne: At Spring Valley and Wayne High Schools a dental hygienist from Valley Health Systems saw individual students upon referral from the SBHC; 4 students were seen from each of the high schools. The school nurses report that they provided fluoride to several hundred students grades 1-5 and the county hygienist did classroom education with 9-12 graders.
52. Webster: one school nurse responded that they had provided fluoride to 1400 students K-6; and several referrals to dentists, as well as classroom education
53. Wetzel: The school nurse replied that no services are being provided in their schools; they have great need; and people with Medicaid must drive at least 30 miles to get care.
54. Wirt: School nurse reports that they provided pre K screenings to 50 children by a community dentist/hygienist.
55. Wood: Six school nurses responded to the survey; they provide screenings/assessments and referrals for several hundred students and all indicated that dental care is extremely needed.
56. Wyoming: Two school nurses responded that 2nd graders in 7 schools receive screenings and referrals by the school nurse; assessments and dental exams by a community dentist. Last year about 300 2nd grade students received services.

Attachment 2

WEST VIRGINIA COUNCIL OF SCHOOL NURSES

RECOMMENDATION

For

DENTAL INSPECTIONS/SCREENINGS

It is the recommendation of the West Virginia Council of School Nurses that dentists conduct proper dental inspections/screenings for all children. W.Va. Code §30-4-15 defines the scope of practice of the dentist as examining, evaluating and diagnosing diseases, disorders and conditions of the oral cavity.

It is within the scope of practice of the certified school nurse to perform a nursing assessment of the oral cavity and recommend to the parent/guardian that further evaluation is needed when a student presents with signs or symptoms or need for examination of the oral cavity. It is the role of the certified school nurse to promote and/or provide oral health education in the school setting.

A letter communicating the results of the oral cavity assessment should be given to the parent or guardian, as soon as possible, when further evaluation is warranted. A method should be developed for tracking referrals and for encouraging follow-ups as needed. The West Virginia Education Information System (WVEIS) provides a method for recording and tracking dental screening results.

It is NOT the role of the certified school nurse to perform massive dental screenings. A total of 98% of West Virginia children have medical insurance and should be receiving a comprehensive physical exam (i.e. HealthCheck) annually with a dental screening. The health provider's dental screening results shall be valid up to one year and meet the requirements of dental screening, as indicate in West Virginia State Board of Education Policy 2525. The school nurse also needs to be aware of community services available to assist students in obtaining follow-up treatment.

DISCLAIMER:

The "Recommendation" of the West Virginia Council of School Nurses (WVCOSN) is not representative of West Virginia State Code or West Virginia State Board of Education recommendation or policy. This is a recommendation based on consensus, evidence-based practice reviews and current research from the WVCOSN. The WVCOSN is set forth by W.Va. Code §18-5-22.