



FUTURE SMILES

SY 2012-2013 Annual Report

Futures Smiles is a non-profit, 501(c)(3), organization specializing in school-based dental hygiene services targeting at-risk children; with a logical and coordinated statistical evaluation of the impact oral health services have in our designated student population, the school community, and beyond.

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**Mission:**

The Mission of Future Smiles (FS) is to achieve optimum oral health in at-risk populations by increasing access to education and prevention of oral disease.

Vision:

Our Vision is to decrease a child's pain and suffering from dental decay through education and prevention of oral disease at a convenient community based site like a School-Based Health Center for Education and Prevention of Oral Disease (EPOD), allowing the child to thrive socially, physically, mentally and academically.

Agency History:

FS is proud to be a Nevada non-profit with a mission to increase access to oral health care in underserved populations. Established in 2009, FS works diligently to provide the essential resources and infrastructure to create public health opportunities for dental hygienists. Through school-based care we focus on a systems approach that removes the common barriers of cost, transportation, lost income from time off of work, and loss of educational time from school. Our ultimate goal is to change the way children and their families think and act, regarding their own health, by instilling positive oral health behavior for a lifetime.

Purpose:

To improve the oral health status of an at-risk population; which integrates a cost effective delivery model that fully utilizes Public Health Dental Hygienists who hold a Public Health Dental Hygiene Endorsement (PHDHE) approved by the Nevada State Board of Dental Examiners (NSBDE). The program collaborates with our restorative dental partners and medical professionals, to increase access in oral health services with a focus on prevention in a school-based setting. Services are to be provided at established School-Based Health Centers (SBHC) or at schools that do not have a SBHC but want to integrate an oral health model into their school setting.

FS pursues alternative sources that increase access in oral health care for underserved, at-risk populations. All services provided by the program target low-income, at-risk children from birth to 18 years of age, and Medicaid enrollees. The program bills for Medicaid/CHIP services when appropriate. It is well documented that there is a broad disparity in oral health care available to at-risk children. Because of this disparity, FS targets at-risk children through the school environment. Any child or family unable to pay for oral health care will receive services at no cost.

Community Need:

In Nevada, more than six out of ten (64.8%) third grade students have experienced tooth decay compared to the National average which is just over half (53%)¹. It is well documented that children from low-income, racial/ethnic minority populations have a higher risk of developing tooth decay. The findings from the 2008 Nevada State Health Division's (NSHD) Basic Screening Survey (BSS) found that the oral disease rate in minority populations living in poverty is significantly higher at 78%, than non-minority children, reaffirming that oral health needs must be addressed in at-risk populations.¹

The harsh reality of current economic times in Nevada has expanded and deepened the needs of Clark County's (Las Vegas, Nevada) underserved. Once a thriving metropolis, Las Vegas has been hit with one of the highest unemployment rates in the nation, resulting in families that are now uninsured and homeless. In the best of times Clark County had minimal medical, mental health and dental services available to address the needs of the uninsured/underserved population. Existing resources have been reduced or eliminated putting more children at risk. According to the Clark County School District (CCSD), over 50% of its students are eligible for the free and reduced meal program, representing 150,000 children living in poverty.² They also report Nevada ranks 45th in the nation in child homelessness.² Coupled with a growing minority population of English language learners and a high transient rate, CCSD faces many challenges when trying to improve its low graduation rate (68% in 2009).² When we look at Nevada's Health Rankings, the two factors that stand out are: 1) education - high rate of high school dropout, low educational level of citizens and 2) income - childhood poverty, lack of



health care and a staggering high rate of homelessness.

In the Association of State and Territorial Dental Directors (ASTDD) publication on Best Practice Project, it states that, “There is a relationship between a child’s health and academic performance.” The document also quotes Former Surgeon General, Dr. Antonia Novello, “Health and education go hand in hand: one cannot exist without the other.”³ The U.S. Department of Education acknowledged that health problems and unhealthy behaviors have a major effect on students’ success. The most cost effective and influential way to address positive health behaviors for the community is to bring health services into at-risk schools⁴. It is critical for the community to intervene by providing cost effective access to health care that works with school administration to jointly impact the health of vulnerable children seeing them to graduation and thriving in life!

Current Activities:

School-Based Health Center for Education and Prevention of Oral Disease (SBHC-EPOD)

FS has found that oral health care is a common community request in needs assessments.¹ At-risk schools typically are interested in providing an oral health program to its students but funding for building a School-Based Health Center (SBHC) can be a barrier. Our program has found a cost efficient system that operates with mobile/portable dental equipment in a dedicated classroom or in an unused modular to provide our oral health services. These services can be ongoing or episodic, depending upon the needs of the school. We refer to our set site facility as a School-Based Health Center for Education and Prevention of Oral Disease (SBHC-EPOD), the short title to be recognized as an EPOD. Our policy and system change goals from these efforts are to: 1) increase the number of schools that provide direct preventive oral health care; 2) increase the understanding of oral health through ongoing education to parents, children and school staff; and 3) show an increase in academic performance (evaluation) 24 months after program enrollment compared to baseline.

The purpose of the EPODs is to integrate cost effective preventive oral health services into schools with SBHCs. At schools that do not have a SBHC, the desire of FS is to start the early stages of a preventive oral health program. All preventive oral health services are provided by Future Smiles (FS), a non-profit organization with a mission to increase access to preventive oral health care in an at-risk population. At the drafting of this report, Clark County has invested into the SBHCs medical/dental models to bring essential wrap-around services into the school community. Two of our program sites (Cunningham SBHC-EPOD and Basic’s Bower’s SBHC) collaborate with FS to integrate oral health into an existing medical model. All program outreach is tracked, evaluated and will be part of a 24 month longitudinal study conducted by Future Smiles (FS), Clark County School District (CCSD) and the Nevada State Health Division’s Oral Health Program (NSHD OHP).

Service Population:

Our **no cost program** targets at-risk Southern Nevada children, birth to high school (HS) graduation, from schools with >50% Free and Reduced meal enrollment (F&R). At-risk is defined as children from low-income families, Medicaid or CHIP enrollees, and/or uninsured-w/out health care. SY 2012-2013 Service Demographics: family of 4 | average monthly income of \$1,287 | typically parents did not graduate from high school | our schools average 75% F&R. Population: 14% African American | 7% Asian/Haw/Ind | 26% Caucasian | 57% Hispanic.

NOTE: Our program demographic software reports multi-racial enrollees in each category representative of >100% ratio.

Brief Description of Current Program (Total 11 CCSD Schools):

FS provides **two types** of operational delivery modes: **A. Set Locations: School-Based Health Center for Education and Prevention of Oral Disease (EPOD)**, and **B. Mobile School-Based Locations**. Our focus is **dental hygiene (DH) services** (\$179 Medicaid value per child visit) which include: screenings, oral health education (OHE), dental cleaning, sealants, fluoride varnish, as well as case management through a referral system to a local dentist(s) or the UNLV School of Dental Medicine (SDM) for restorative dentistry.

- 1) **An EPOD operates in a School-Based Health Center (SBHC), classroom, or a modular.**
The Clark County School District (CCSD) provides space etc. at no cost to FS and we operate **3 EPODs: two schools have a 12 month program (1) Clark (HS) EPOD and (2) Cunningham**



SBHC/EPOD, and one school has a 9 month program at (3) Hollingsworth (ES) EPOD.

- 2) **FS Mobile serves 8 temporary (1 month average) school-based locations** utilizing portable dental units manufactured by DNTLworks. These units can go anywhere as they are light weight (50lbs or less), on wheels and fold into suitcase containers. All at-risk children enrolled in the school are eligible for our services. Further impact is achieved through OHE presentations, “brush at lunch” presentations, health fairs and program services provided at community health clinics, like Helping Kids Clinic.

Significant Accomplishments:

As we increase the number of children who benefit from dental sealants, we likewise see a decrease in untreated tooth decay in subsequent years, as confirmed in this graph from our Cunningham SBHC-EPOD (Figure 2). Our third EPOD is located at Hollingsworth Elementary School (ES) (Figure 3) where the program is fully integrated into the school community, as it is set-up in a large classroom by the school Principal’s request. From our initial oral health screenings, in SY 2010-2011, at Hollingsworth ES, FS found that 49% of the children screened had untreated dental decay. However we suspected that this percentage is low, as the mean age of children screened was 6 years of age with a mean grade level of 1st grade, and not a true snap shot of the oral health status of the entire school population. As oral health professionals we asked ourselves, “How much oral decay would we find in the older populations at the school?” The EPOD has successfully partnered with the school administration to increase the number of positive consent forms from the families at the schools so that the program can provide oral health services to a larger school population. In the SY 2012-2013 we have seen an enrollment increase from 97 students in SY 2010-2011 (baseline) to 404 students in SY 2012-2013. We have also seen a 40% increase in dental sealants (60%) and a 10% decrease in untreated tooth decay (39%) in our current SY 2012-2013.

Our data is compelling and confirms that preventive dental care (sealants) can avert tooth decay. Since inception in 2009, FS has provided over \$726,043 in Medicaid valued services: A) 7,224 children received OHE, B) 12,390 dental sealants, C) 5,627 fluoride varnish, and D) 2,506 dental cleanings.

SY 2012-2013 Program Statistics

- | | |
|---|---|
| ▪ Mean age- 7 years 2nd grade | ▪ 46% children have untreated tooth decay |
| ▪ 75% of the children served are on F&R | ▪ 13% children have urgent dental needs |
| ▪ 37% Medicaid 63% uninsured | ▪ 50% have protective dental sealants |

During the summer months of June-August 2013 FS will continue to provide part-time oral health care at the Cunningham SBHC-EPOD, Clark EPOD and Basic’s Dr. Joel and Carol Bower SBHC. It is our intention to become an integral part of the school, a role model for the children and a safety net provider making a difference in the lives and health of these children/families that benefit from the EPOD experience. FS works diligently to establish a dental home for all recipients, and as such, our program has a goal to provide routine care appointments. Routine care includes at least one preventive service such as oral health education, a dental cleaning, fluoride varnish/topical application, sealant application and retention check, which are provided not less than every 12 months and not more than every 6 months. These appointments are based on recipient availability and residency in Clark County.

2013-2014 Goals Include:

- >1,200 at-risk children shall receive an oral health screening with all data to be tracked and reported under the CDC software SEALS
- >1,200 children shall receive an oral health education experience
- 2,400 or more dental sealants shall be applied
- 1,500 or more fluoride varnish/topical applications
- 500 dental cleanings (child prophylaxis)
- The Medicaid value for these services would equal \$163,200



Future Smiles EPOD Locations

Clark EPOD **dental hygiene*

Ed W. Clark High School
4291 Pennwood Avenue
Las Vegas, Nevada 89102
Phone: (702) 889-3863
Fax: (702) 889-3591
Email: futuresmiles@centurylink.net

Cunningham SBHC-EPOD **dental hygiene and medical services*

Cynthia Cunningham Elementary
4145 Jimmy Durante Blvd.
Las Vegas, Nevada 89122

Hollingsworth EPOD **dental hygiene*

Howard Hollingsworth Elementary School
1776 East Ogden Avenue
Las Vegas, Nevada 89101

Future Smiles Mobile

School-Based Sealant Events-(mobile/portable equipment)

Basic High School's Dr. Joel and Carol Bower SBHC **dental hygiene and medical services*
400 Palo Verde Drive
Henderson, NV 89015

William G. Bennett Elementary School **dental hygiene*

2750 South Needles Hwy
Laughlin, NV 89029

J. Harold Brinley Middle School **dental sealants*

2480 Maverick Street
Las Vegas, NV 89108

Chaparral High School **dental hygiene*

3850 Annie Oakley Drive
Las Vegas, NV 89121

Fay Herron Elementary School **dental sealants*

2421 North Kenneth Way
North Las Vegas, NV 89030

Laughlin Jr/Sn High School **dental hygiene*

1900 Cougar Drive
Laughlin, NV 89029

Reynaldo Martinez Elementary School **dental sealants*

350 East Judson Avenue
North Las Vegas, Nevada 89030

Whitney Elementary School **dental hygiene*

5005 Keenan Ave
Las Vegas, NV 89122



Community Health Fairs:

These events are ongoing and are typically organized by the Southern Nevada Immunization and Health Coalition (SNIHC) and Shots 4 Tots. When invited to participate, FS will fax a statement to the Nevada State Board of Dental Examiners (NSBDE) regarding our attendance and event location. Community Health Fairs allow the program an opportunity to provide an oral health screening, oral health education and fluoride varnish application. All infection control CDC guidelines are adhered to at these events. Personal Protection Equipment (PPE) includes: masks, gloves, safety glasses, individual optic light (hands free equipment), disposable mouth mirror, gauze, counter disinfectant and etc.

Current Funding:

With solid **private/public partnerships**, we leverage our FS dollars by uniting with CCSD and the City of Las Vegas (CLV) for our no-cost facility space. Additional workforce collaboration is formed with higher education's dental programs from UNLV SDM and the College of Southern Nevada (CSN). Recently, Gov. Sandoval announced that Nevada will support the 2014 expansion of Medicaid, providing an additional 78,000 citizens health care coverage. Many of these Nevadans are school age children and FS believes that Medicaid reimbursement will provide future funding sustainability by 2015. FS is staffed by 8 DH Medicaid/CHIP providers.

Source	SY 2013-2014 Funding Stream
Private	Razoo, PayPal, Nevada Big Give
Local	Clark County Public Education Foundation (CCPEF), Golden Nugget Foundation (GNF), 8 News NOW, McFadden Charitable Foundation (MCF), Nevada Community Foundation (NCF), United Way of So. Nevada (UWSN)
National	ADHA Wm. Wrigley Foundation (WF), CVS Caremark Charitable Trust (CVS), Oral Health America
State	Medicaid Reimbursement (8 DH Medicaid Providers)
Federal	Nevada State Health Division's (NSHD) Oral Health Program (OHP)
Public	Clark County School District (CCSD), City of Las Vegas (CLV), UNLV School of Dental Medicine (SDM), CSN Dental Hygiene Program

A Solution to Address Unmet Oral Health Needs:

FS promotes working within the dental community to establish a dental home for at-risk children and their families by providing oral health education and direct dental services at SBHC, within the school setting and at community health fairs.

Our oral health services include:

- 1) Oral health screening with data collection
- 2) Dental cleaning (prophylaxis)
- 3) Fluoride varnish/topical application
- 4) Dental sealants
- 5) Communication with parent/guardian regarding oral health status and referral to a community dental provider for restorative dental needs ensuring that the child gets the care that they need

All services are provided to individuals who have been identified as attending schools with 50% or higher free and reduced lunch, uninsured/underserved, low-income and at-risk populations. No child in need is declined care through our program and all services are provided at no cost to the child or family. Our primary goal is to enhance our recipient's health and well-being, thereby improving their capacity to learn and succeed within the school environment now and in the future.

Program Partners and Collaborations:

FS strives to create long-lasting changes in the way people think and act regarding the value of oral health by bringing together strong partners committed to the prevention of oral health disease.



Our greatest strength is the ability to network with organizations that target the supportive needs of those who are less fortunate. One area where we have had great success is working with the CCSD's staff to identify children in oral pain. As a school-based provider, school counselors and teachers have brought these needy children to our door for immediate care. Other professional collaborations include membership in the Community Coalition for Oral Health (CCOH), Southern Nevada Immunization and Health Coalition (SNIHC) and the Southern Nevada Dental Hygienists' Association (SNDHA), which have all resulted in each of these organizations supporting Future Smiles through program funding. It takes everyone in the community working together to address the oral health needs of the children we serve. In addition, we have strong collaborative relationships that help us provide oral health services to children in need (oral pain) with the following organizations:

- 1) Communities In Schools
- 2) Children's Dental International
- 3) College of Southern Nevada
- 4) City of Las Vegas-EPOD sponsor at Clark HS
- 5) Helping Kids Clinic
- 6) Huntridge Teen Clinic
- 7) Positively Kids
- 8) Project Smile-This program is sponsored by the Clark County Public Education Foundation to support dental care to low income children.
- 9) Southern Nevada Dental Hygienists' Association
- 10) Southern Nevada Immunization and Health Coalition
- 11) UNLV School of Dental Medicine (SDM)-No Cost Saturday Dental Clinics
- 12) Clark County Dental Initiative-UNLV SDM and FS collaboration providing school-based dental services in Clark County, NV.
- 13) United Way of Southern Nevada

Program Evaluation:

Sealant Efficiency Assessment for Locals and States (SEALS), developed by the Centers for Disease Control and Prevention (CDC), tracks and evaluates our program deliverables, providing a snapshot view of oral disease rates and program success performed by FS in Southern Nevada. In a recent evaluation of FS by the *Robert Wood Johnson Foundation (RWJF)*, it was identified that our longitudinal study, *Future Smiles Outcome Study (FSOS)*, conducted by FS and CCSD, could successfully illuminate the relationship of a dental care program on student academic performance. RWJF expressed potential interest in further evaluation.

The following SY 2012-2013 Program Outcome Percentages by Schools table (Figure 9) shows that only 4 out of 10 children served were covered by Medicaid (37.8% Medicaid) and that 13% of the children experience oral pain on a daily basis. Furthermore, nearly half (48.2% untreated decay) of the children presented with untreated tooth decay. Our data sadly confirms, that over half of the children served by FS, are without dental insurance (62.2% uninsured) and living in daily pain from untreated tooth decay! It is well documented that children from low-income, racial/ethnic minority populations have higher risk factors of living in poverty, as resources are less available for these children and, unfortunately, they accept living with oral pain as a normal way of life!

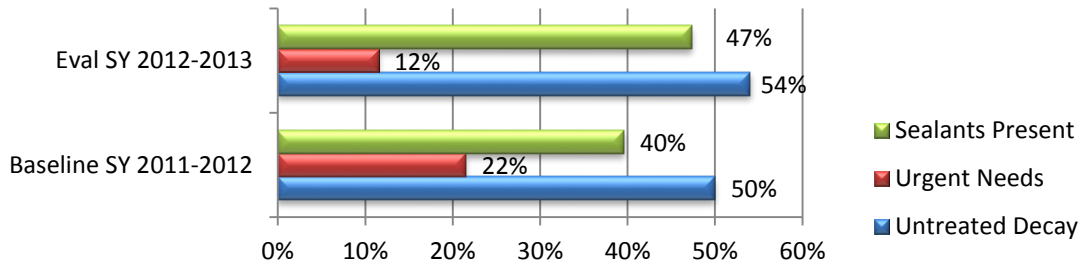
All children served by FS, even those in good oral health, are referred for a comprehensive dental exam to establish a dental home. The program works hard to assist families by scheduling urgent dental needs with a dental provider. As oral health professionals, we can attest to the fact that oral disease is progressive and cumulative in nature; it is responsible for pain, discomfort, poor school performance, poor nutrition, diminished self-esteem and if left untreated, the disease becomes more complex and difficult to manage.

Additional data collected by FS reveals that our target population has a:

- Mean monthly household income well below Federal Poverty Level (FPL), at \$1,287
- Mean family members in the home are 4.4
- Mean parent education is 11th grade
- 50% are single parents

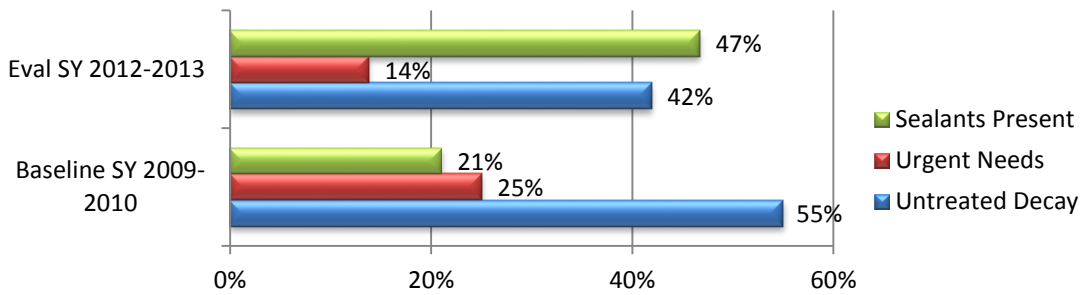


Figure 1: Clark EPOD



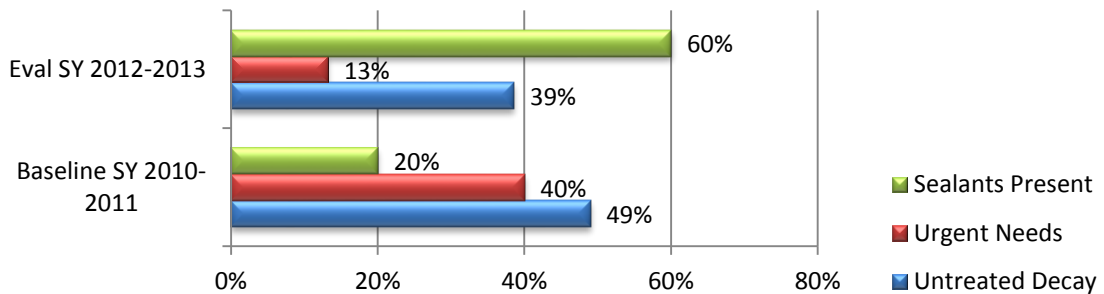
	Baseline SY 2011-2012	Eval SY 2012-2013
Sealants Present	40%	47%
Urgent Needs	22%	12%
Untreated Decay	50%	54%

Figure 2: Cunningham SBHC/EPOD



	Baseline SY 2009-2010	Eval SY 2012-2013
Sealants Present	21%	47%
Urgent Needs	25%	14%
Untreated Decay	55%	42%

Figure 3: Hollingsworth EPOD



	Baseline SY 2010-2011	Eval SY 2012-2013
Sealants Present	20%	60%
Urgent Needs	40%	13%
Untreated Decay	49%	39%



Figure 4: Children's Oral Health Screenings at EPOD Schools

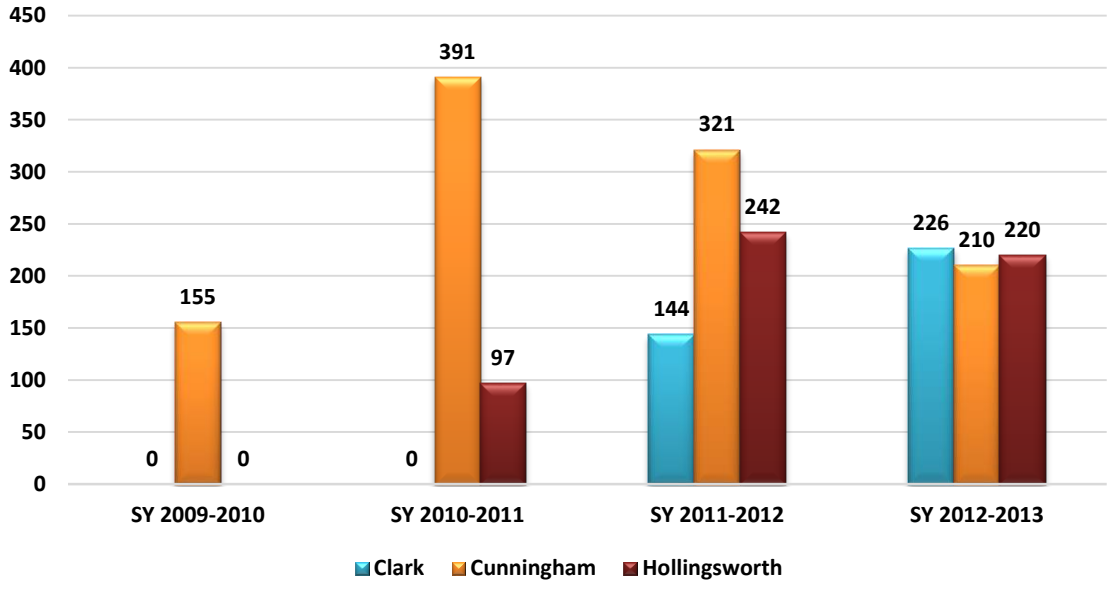
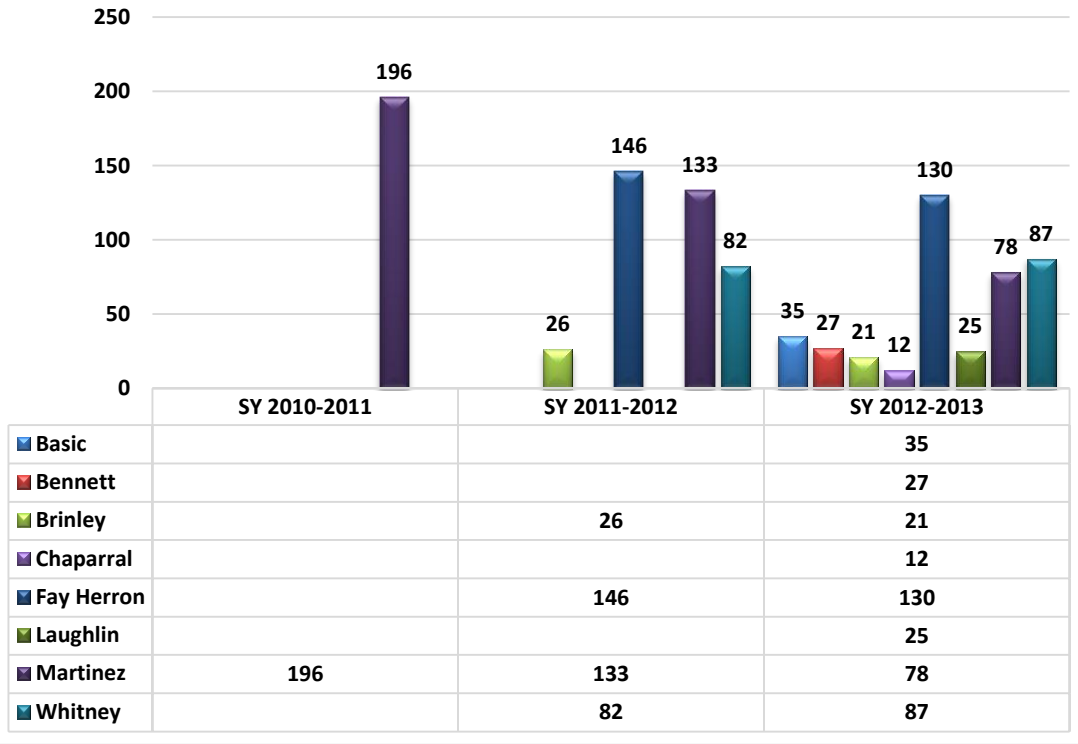
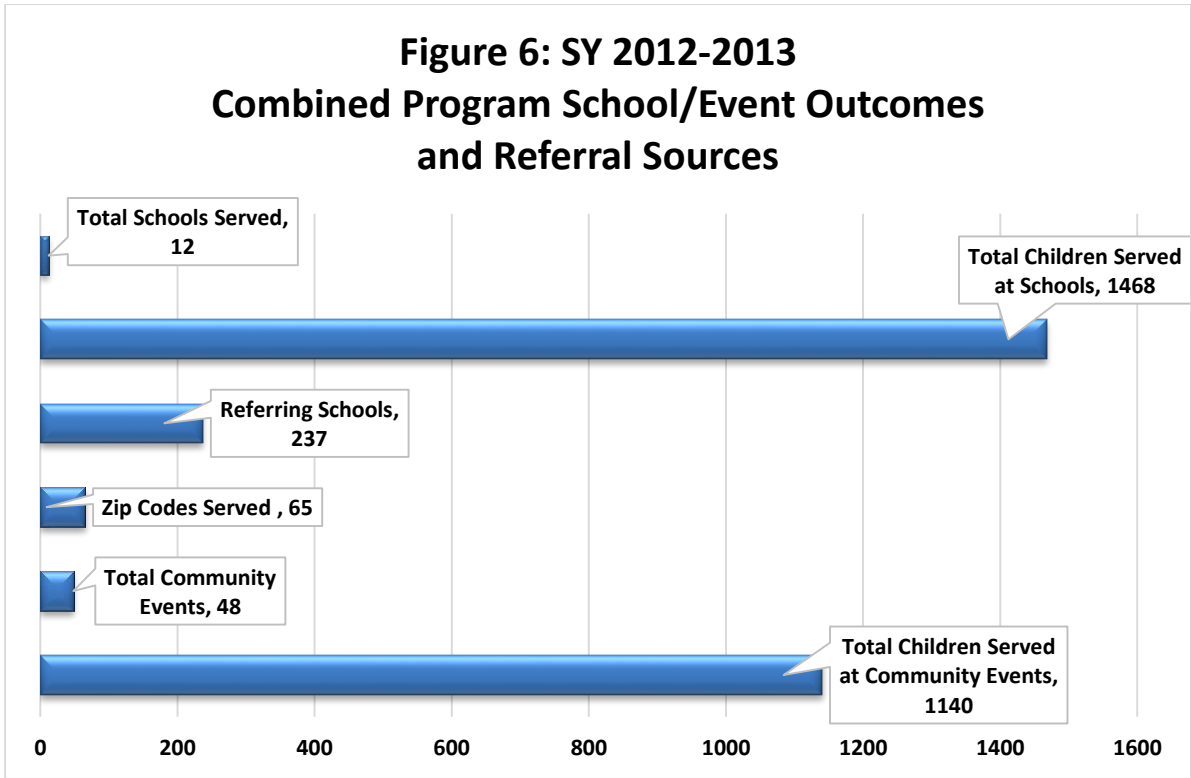


Figure 5: Children's Oral Health Screenings by Future Smiles Mobile at Additional Schools





**Figure 6: SY 2012-2013
Combined Program School/Event Outcomes
and Referral Sources**



**Figure 7: SY 2012-2013
Future Smiles Outreach Population**

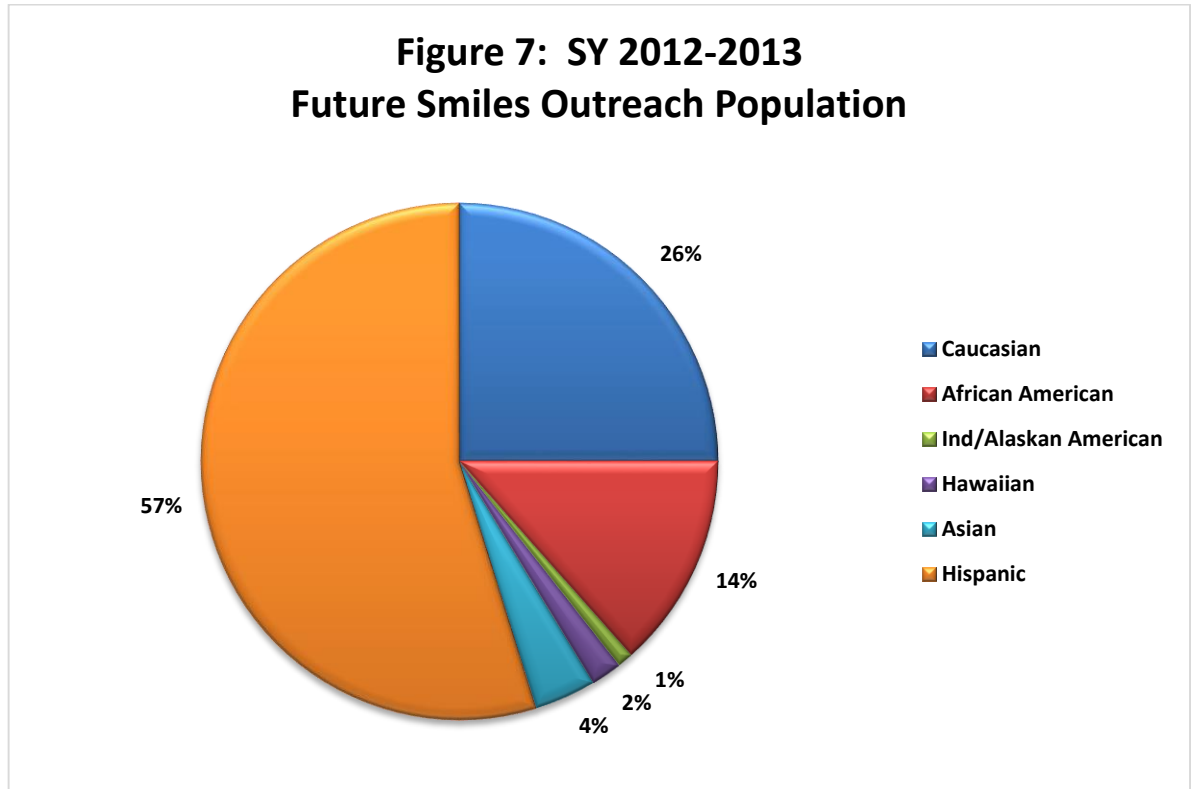




Figure 8: Annual Program Demographics by Schools

SY 2012-2013	ANNUAL PROGRAM DATA (BY SCHOOLS)					Future Smiles	
School	Student Population (#)	Free/Reduced Lunch (#)	Eligible for F/R Lunch	# of Sealant Students	% of Sealant Students	Total # of Sealants	
Clark County							
Basic HS	2286	1046	45.76%	21	2.00%	155	
Bennett ES	320	231	72.19%	18	7.79%	91	
Brinley MS	926	762	82.29%	14	1.84%	87	
Chaparral HS	2294	1401	61.07%	12	0.86%	141	
Clark HS	2993	1766	59.00%	140	6.74%	1,189	
Cunningham ES	815	629	77.18%	96	15.26%	459	
Fay Herron ES	911	884	97.03%	43	4.86%	137	
Hollingsworth ES	652	603	92.48%	90	14.93%	277	
Laughlin JR-SR	392	223	56.89%	19	8.52%	199	
Martinez ES	591	638	108%	42	6.58%	171	
Whitney ES	563	481	85.44%	46	9.56%	237	
Helping Kids Center	n/a	n/a	n/a	7	n/a	56	
Totals	12	12,263	8,089	76.12%	548	7.18%	3,199

Figure 9: Annual Program Outcome Percentages by Schools

SY 2012-2013	School	% of children with sealants	% of children with untreated decay	% of children with dental urgency	% of children on Medicaid
Clark County					
Basic HS		31.4%	60.0%	28.6%	11.4%
Bennett ES		51.9%	40.7%	7.4%	63.0%
Brinley MS		85.7%	38.1%	4.8%	33.3%
Chaparral HS		25.0%	75.0%	16.7%	41.7%
Clark HS		47.3%	54.0%	11.5%	12.4%
Cunningham ES		46.7%	41.9%	13.8%	35.7%
Fay Herron ES		46.2%	48.5%	14.6%	49.3%
Hollingsworth ES		60.0%	38.6%	13.2%	51.9%
Laughlin JR-SR		84.0%	48.0%	16.0%	40.0%
Martinez ES		62.8%	46.2%	12.8%	62.8%
Whitney ES		51.7%	57.5%	24.1%	36.7%
Helping Kids Center		11.1%	29.6%	3.7%	14.8%
Totals	12	50.3%	48.2%	13.9%	37.8%



REFERENCES

1. Nevada State Health Division, Burden of Oral Disease in Nevada 2008-2009, Bureau of Child, Family and Community Wellness, Nevada State Health Division Department of Health and Human Services, Carson City, NV, October 2009
2. Nevada Annual Reports for Accountability, District, Clark <http://nevadareportcard.com/>
3. Association of State of State and Territorial Dental Directors.2010. Best Practice Approach: Improving Children's Oral Health through Coordinated School Health Programs. Sparks, NV: Association of State and Territorial Dental Directors. <http://www.astdd.org/improving-childrens-oral-health-through-coordinated-school-health-programs-introduction/>
4. U.S. Department of Health and Human Services. Healthy People 2010, 2nd ed. with Understanding and Improving Health and Objectives for Improving Health. 2 vols. Washington, DC: U.S. Government Printing Office; November 2000