

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



## 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 provides 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 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 model delivered by Public Health Dental Hygienists who hold a Public Health Dental Hygiene Endorsement (PHDHE) approved by the Nevada State Board of Dental Examiners (NSBDE). Future Smiles 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 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.

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. FS pursues alternative sources of funding that increase access in oral health care for these 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. Any child or family unable to pay for oral health care receives services at no cost.

#### **Community Need**

The Clark County School District (CCSD) provides public education to all children in Clark County, is the 5th largest school district in the United States, and the largest school district in Nevada. CCSD has a K-12 enrollment of 311,429 students, and is home to over 70% of Nevada's students.<sup>1</sup>

When we look at our local school communities in Clark County (Las Vegas, Nevada) our educational system is reflective of our disparities in health care, high unemployment, economic insecurity, low high school graduation rates, and poor performance in standardized testing. All these elements create the perfect storm leaving those who were already underserved less likely to receive the necessary access to dental care. CCSD has a staggeringly low high school graduation rate when compared to the Nation (bottom third). For the class of 2013, CCSD had a high school graduation rate of 71.5%.<sup>2</sup>

Furthermore, the District is home to a high percentage of children living in poverty: 56.6% of the CCSD student population receives free or reduced lunch (FRL), and 17.6% are limited English proficient (LEP).<sup>2</sup> CCSD is now a minority-majority District, with a Hispanic student population of 43.85% and Caucasian students accounting for 29.43%.<sup>2</sup> Demographics such as these are characteristic of high-need populations and are directly correlated with poor oral health and limited access to oral/dental health services.



Tooth decay is a manageable and preventable condition. However, if dental caries begins before the age of six, there is a severe risk to damaging the teeth and affecting the overall well-being of the child. Nevada consistently ranks high in children's tooth decay rate when statewide surveillance is conducted;

- 6 out of 10 children (64.8%) of Nevada's third grade students have experienced tooth decay.<sup>3</sup>
- In comparison, the National average caries experience in children 6-9 is 54.4% and the Healthy People (HP) 2020 Goal is 49%.<sup>4</sup>

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;

Oral disease rate in minority populations living in poverty is significantly higher at 78%, than non-minority children.<sup>3</sup>

Las Vegas continues to recover from the recent recession and still endures one of the nation's highest unemployment rates, uninsured children and homelessness in children. Existing resources have been reduced or eliminated resulting in more children at risk. As expected, vulnerable populations are suffering the most, according to the Nevada Annual Reports for Accountability:

- 53.45% of Clark County School District's (CCSD) students are eligible for the free and reduced lunch (FRL).<sup>2</sup>
- 124,532 children living in poverty.<sup>2</sup>
- Nevada ranks 45th in the nation in child homelessness.<sup>5</sup>

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). 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 staggeringly high rate of homelessness.

In the publication on Best Practices of 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." 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 schools<sup>4</sup>. Future Smiles provides cost effective access to health care that works with school administrations to jointly impact the health of vulnerable children, which benefits their school work and potentially improving their chances to graduate and thrive in life.

## **Current Activities**

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

Future Smiles has found that oral health care is a common community request in needs assessments. 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. FS 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

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(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 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 Future Smiles is to start the early stages of a preventive oral health program. 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 the 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 <u>no cost program</u> targets at-risk Southern Nevada children, birth to high school (HS) graduation, from schools with more than 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.

## In SY 2014-2015 under the Future Smiles Program, we served:

## **Service Demographics**

Data collected by FS reveals that our target population has a:

- Mean monthly household income well below Federal Poverty Level (FPL), at \$1,415
- Mean family members in the home are 4.5
- Mean parent education is 12<sup>th</sup> grade
- 20% are from a single parent home
- 80% are from a 2 parent home

## **Population Profile**

7% Asian/Haw/Ind | 17% African American | 16% Caucasian | 65% Hispanic.

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

#### **Program Statistics**

- Mean age 8 years old and in 3<sup>rd</sup> grade
- 81.5% of the children served are on Free and Reduced lunch
- 49% Medicaid
- 51% uninsured
- 41% of the children have untreated tooth decay
- 11% have urgent dental needs

## 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.

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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) Digital dental x-rays (limited locations)
- 6) Communication with parent/guardian regarding oral health status
- 7) Referral to a community dental provider(s) for restorative dental treatment
- 8) Long term goals ensures that the child gets the dental care that they need

All services are provided to individuals who have been identified as attending schools with 50% or higher FRL, 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 program works with local dental professionals and dental hygiene students from the College of Southern Nevada. In FY 2014-2015 the program benefited from volunteer hours to include:

## **Volunteer In-Kind Donation**

- A. Nonprofit Administration
   213 hours for volunteer grant writing, reporting, communications, website maintenance, and etc.
- B. Public Health Dental Hygienists150.5 hours for volunteer clinical and operations duties
- C. College of Southern Nevada Dental Hygiene Students **149.5 hours** for volunteer clinical observation

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 the 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.

In addition, we have strong collaborative relationships that help us provide oral health services to children in need (oral pain) with the following organizations:

#### **Our Community Partners**

- 1) Children's Dental International
- 2) City of Las Vegas-EPOD sponsor at Clark HS
- 3) Clark County Dental Initiative-UNLV SDM and FS collaboration providing school-based dental services in Clark County, NV.
- 4) College of Southern Nevada

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## **Our Community Partners-Continued**

- 5) Communities In Schools
- 6) Eye Care 4 Kids
- 7) Helping Kids Clinic
- 8) Huntridge Teen Clinic
- 9) Positively Kids
- 10) Project Smile-This program is sponsored by the Clark County Public Education Foundation to support dental care to low income children.
- 11) Southern Nevada Dental Hygienists' Association
- 12) Southern Nevada Immunization and Health Coalition
- 13) Three Square
- 14) United Way of Southern Nevada
- 15) UNLV School of Dental Medicine (SDM)-No Cost Saturday Dental Clinics

## **Brief Description of Current Program-Total 21 CCSD Schools Served**

It is our intention to become an integral part of the school, a role model for the children and safety net provider making a difference in the lives and health of these children/ families that benefit from EPOD experiences, 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 six months to the resident children of Clark County.

Future Smiles is staffed by nine dental hygienists with a Public Health Dental Hygiene Endorsement (PHDHE), this special license allows the dental hygienists the ability to treat underserved populations without direct supervision from a dentist.

All children served by FS, even those in good oral health, are referred for a comprehensive dental exam to an established dental provider. Future Smiles 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.

## FS Provides Two Types of Operational Delivery Modes:

- A. Set Locations-referred to as an SBHC/EPOD for sites that offer both medical and dental care. EPOD for sites that only offer dental care. What the acronyms stand for:
  - School-Based Health Center (SBHC) for Education and Prevention of Oral Disease (EPOD)
- B. Mobile School-Based Locations-when we offer "carry in and carry out" portable dental care.

With a focus on **dental hygiene services** (\$179 Medicaid value per visit) we provide: 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 dental treatment.

1) An EPOD operates in a School-Based Health Center (SBHC), classroom, or a modular. The Clark County School District (CCSD) provides space and other support at no cost to FS and we operate 5 EPODS under two different schedules. Three schools have a 12 month program (1) Clark (HS) EPOD and (2) Cunningham SBHC/EPOD,(3) Martinez SBHC/EPOD and two school has a 9 month program at (4) Hollingsworth (ES) EPOD and (5) Fay Herron EPOD.

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2) FS Mobile serves 16 temporary (2-3 week 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 see a decrease in untreated tooth decay in subsequent years, as confirmed in this graph from our Cunningham SBHC-EPOD (Figure 1). Our third EPOD is located at Hollingsworth Elementary School (ES) (Figure 2) where the program is fully integrated into the school community.

Hollingsworth ES: From our initial oral health screenings in SY 2010-2011, FS found that 49% of the children screened had untreated dental decay and of those 40% were in urgent dental treatment need (pain). In the SY 2014-2015, we have seen an enrollment increase from 97 students in SY 2010-2011 (baseline) to 321 students in SY 2014-2015. We have also seen a 25% decrease in untreated dental decay (23.7 % SY 2014-2015) and a dramatic 29% decrease in children with urgent dental needs (pain) with a program low of 11.6% total urgent dental pain in the Hollingsworth ES student population from SY 2014-2015.

Since inception in 2009, FS has provided over \$1.6 million in Medicaid valued services: A) 18,745 children received oral health education, B) 10,525 oral health screenings, C) 25,719 teeth received dental sealants, D) 10,801 fluoride varnish, and E) 5,071 dental cleanings. During the summer months of June-August 2015 FS provided part-time oral health care at the Cunningham SBHC-EPOD, Martinez SBHC/EPOD, Clark EPOD, Basic's Dr. Joel and Carol Bower SBHC and Wynn ES.

#### 2014-2015 Outcomes

- 3,344 at-risk children shall receive an oral health screening with all data to be tracked and reported under the CDC software SEALS
- 7,560 children shall receive an oral health education experience
- 9,051 teeth received dental sealants
- 3,401 or more fluoride varnish/topical applications
- 1,694 dental cleanings (child prophylaxis)
- The Medicaid value for these services would equal \$531,800

#### **Community Health Fairs**

These events are ongoing and are typically organized by the Southern Nevada Immunization and Health Coalition (SNIHC) and Shots 4 Tots. 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 and Personal Protection Equipment (PPE) including: masks, gloves, safety glasses, individual optic light (hands free equipment), disposable mouth mirror, gauze and counter disinfectant are utilized during the administration of oral health services.

## **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 support of the 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

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provide future funding sustainability by 2015. FS is staffed by 11 DH Medicaid/CHIP providers.

We deeply appreciate all of our donors and sponsors for their strong belief and commitment to Future Smiles and our mission.

SY 2014-2015	Donor List
2014	ADHA/Wrigley Foundation
2014	Donald Reynolds Foundation
2014 & 2015	Elaine P. Wynn Family Foundation
2014 & 2015	McFadden Charitable Foundation
2014 & 2015	Private Donation Razoo & Nevada Big Give
2014& 2015	City of Las Vegas-Community Development Block Grant
2014	DentaQuest Foundation
2014 & 2015	MGM Resorts Foundation
2014 & 2015	United Way of Southern Nevada
2015	Golden Nugget
2015	Nevada Women's Philanthropy Founders Award

## **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.

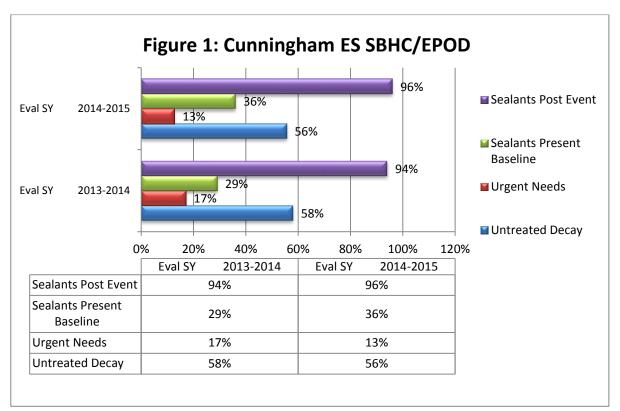
In SY 2014-2015 less than 5 out of 10 children served were covered by Medicaid (49% Medicaid) and that 51% were uninsured. However, the program continues to make strides in oral health outcomes with a 41% untreated tooth decay rate in students served in SY 2014-2015. This is a measurable decrease of 7% in untreated tooth decay rates when compared to SY 2012-2013 (48.2% untreated decay). We can also document that urgent dental needs continue to escalate at 11% when compared to the previous school year (9% total urgent dental need in SY 2013-2014). Through our EPOD open community model students from 132 schools have been served in the past school year.

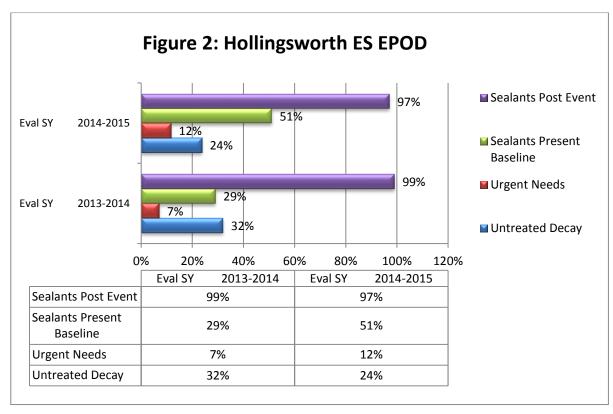
It is well documented that children from low-income, racial/ethnic minority populations have higher risk factors of living in poverty with less economic resources for seeking oral care and this unfortunately translates into accepting that living with oral pain is a normal way of life for children.

Beginning in the summer of 2014, Future Smiles will commence a multi-year intensive review of three Clark County School District school-based dental-health locations, where Future Smiles has provided preventative dental services. We will evaluate the status of dental health among the treated children and perform an assessment of the impact of the dental care on other factors in the lives of the children. Our evaluation focuses on three schools in CCSD with high rates of free and reduced lunch: Cunningham Elementary, Hollingsworth Elementary, and Martinez Elementary School. These schools are all part of the on-going Future Smiles dental program.

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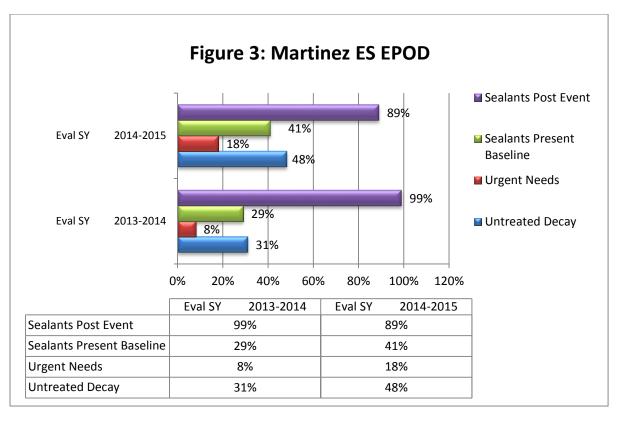


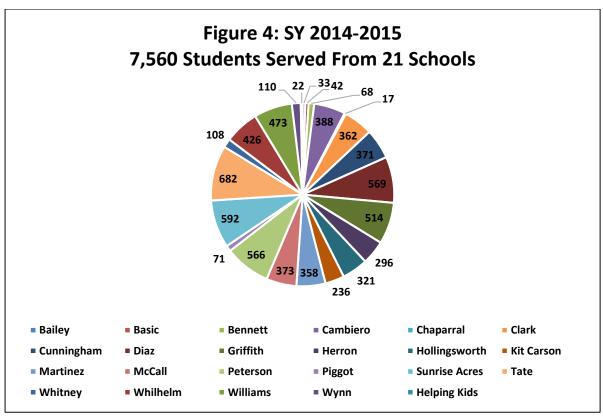




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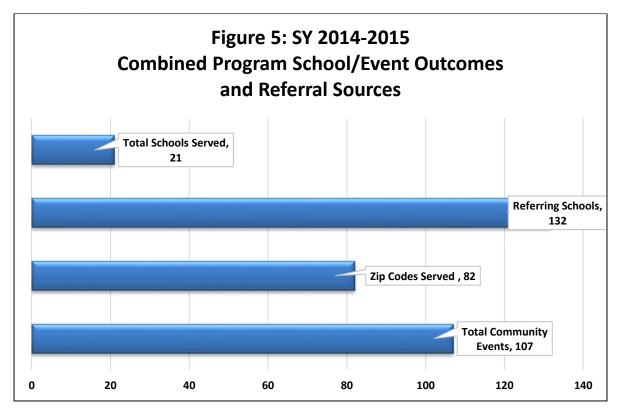


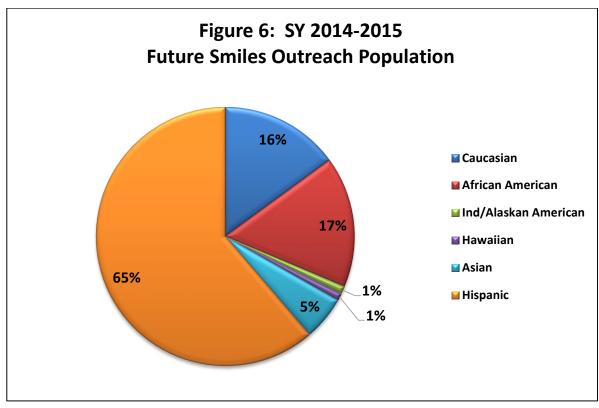




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# Figure 7: SY 2014-2015 School Demographics

SY 2014-2015		Future Smiles					
School	Student Populati on (#)	% Free & Reduced Lunch	# Free & Reduced Lunch	# of Sealant Students	# of OHI Education Students	% of Sealant Students from OHI	Total # of Teeth w/Sealants
Clark County School District (CCSD)							
Bailey MS	1,213	89%	1,079	31	33	94%	308
Basic HS	2,347	51%	1,196	33	42	79%	294
Bennett ES	315	76%	239	39	68	57%	141
Cambiero ES	637	99%	630	Pending	267	Pending	Pending
Chaparral HS	2,204	67%	1,476	15	17	88%	149
Clark HS	3,001	62%	1,860	191	317	60%	1,529
Cunningham ES	802	77%	617	133	320	42%	802
Diaz ES	877	93%	815	Pending	466	Pending	Pending
Fay Herron ES	958	90%	862	133	256	52%	509
Hollingsworth ES	717	96%	566	67	271	25%	244
Kit Carson ES	458	79%	361	22	236	9%	95
Martinez ES	724	100%	724	101	195	52%	634
McCall ES	498	93%	463	65	373	17%	257
Petersen ES	898	100%	898	87	566	15%	419
Piggott ES	588	39%	229	NA	71	NA	NA
Sunrise Acres ES	877	100%	877	56	592	9%	187
Tate ES	802	97%	777	89	584	15%	386
Whilhelm ES	668	76%	507	60	448	13%	231
Whitney ES	611	88%	537	70	108	65%	285
Williams ES	374	91%	340	133	179	74%	484
Wynn ES	967	92%	889	7	13	54%	46
Clark HS K. Saturday	NA	NA	NA	1	5	20%	14
Helping Kids Clinic	NA	NA	NA	11	22	50%	78
Health Fairs	NA	NA	NA	NA	653	NA	NA
Total Schools: 21	20,536	<b>86%</b> *Ave	15,942	1,344	6,102	<b>46%</b> *AVE	7,092

<sup>\*\*</sup> Free and Reduced Lunch Enrollment (FRL) and student enrollment totals are from CCSD report *Nevada Schools Count Day Enrollment for Free and Reduced Lunch* print date 1/31/2015.

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<sup>&</sup>lt;sup>1</sup> Clark County School District Fast Facts 2013, District, Clark [Internet]. [Cited 2014 August 15]. Available from: http://ccsd.net/district/news/publications/pdf/CCSDFastFactsColor-Nov13.pdf

<sup>&</sup>lt;sup>2</sup> Nevada Annual Reports for Accountability SY 2012-2013, District, Clark [Internet]. [Cited 2014 August 15]. Available from: http://nevadareportcard.com/

<sup>&</sup>lt;sup>3</sup> Nevada State Health Division, Burden of Oral Disease in Nevada 2012, Bureau of Child, Family and Community Wellness, Nevada State Health Division Department of Health and Human Services, Carson City, NV, April 2012 [Internet]. [Cited 2014 August 15]. Available from: <a href="http://health.nv.gov/Cancer/BurdenOralDisease2012.pdf">http://health.nv.gov/Cancer/BurdenOralDisease2012.pdf</a>

<sup>&</sup>lt;sup>4</sup> Healthy People 2020, Healthy People.gov [Internet]. [Cited 2014 August 18] Available from: http://healthypeople.gov/2020/Data/SearchResult.aspx?topicid=32&topic=Oral%20Health&objective=OH-1.2&anchor=189208

<sup>&</sup>lt;sup>5</sup> State Report: Nevada's Campaign to End Child Homelessness. The National Center On Family Homelessness [Internet]. [Cited 2014 August 15]. Available from: http://www.familyhomelessness.org/#

<sup>&</sup>lt;sup>6</sup> 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. [Internet]. [Cited 2014 August 15]. Available from: http://www.astdd.org/improving-childrens-oral-health-through-coordinated-school-health-programs-introduction/