

2012-2013

# Brush to Crush Cavities Program



## Collaborating Organizations:

Cayuga County Health Department

Cayuga Community Health Network

East Hill Family Medical, Inc.

Genesee Elementary

Auburn Enlarged City School District

This report was completed by:  
The Cayuga County Health Department

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Welch Allyn

Your support of this program is greatly appreciated by the Brush to Crush Cavities Committee, school administrators, school staff and most of all by the students.

Your donations and support played an influential role in assisting us with the implementation of the Brush to Crush Cavities Program.

## **Organizational Background**

### **Cayuga County Health Department –**

Our mission is to promote and protect the health and well-being of the individual families and the community we serve.

For thirty years the Health Department had administered the School-Based Preventive Dentistry Program, funded through the New York State Department of Health. A dental hygienist and dental assistant visited every public elementary school in the county each year. Services provided by our staff include; dental screening on specific grade levels, sealants and referral to dental providers should a child need treatment. The Health Department did not reapply for the School-Based Dental grant in 2011. East Hill Family Medical applied for the grant with full support from the Health Department.

### **Cayuga County Community Health Network –**

Founded in 1997, CCCHN, Inc. is a 501(c)(3) not-for-profit corporation, one of 37 Rural Health Networks funded under the New York State Rural Health Network Demonstration Program. The Network strives to improve the overall health of Cayuga County residents by addressing access and service needs of the community. The Network also develops and sponsors prevention and health promotion programs that reduce barriers to health care services. The Network achieves these goals through development of collaborative strategies to assess and articulate the nature and extent of county healthcare needs and securing the resources to address them.

### **East Hill Family Medical, Inc. –**

At East Hill Family Medical, our mission is to ensure the availability and accessibility of quality health care for every individual. East Hill Family Medical provides comprehensive dental services for children and adults, including preventative services, extractions, restorations (fillings) and dentures. All services are provided on a sliding fee scale. An on-site facilitated enroller is available for health insurance consultation.

Beginning July 2011, East Hill Family Medical was awarded the School-Based Preventive Dentistry Program grant. East Hill Family Medical will be conducting dental screenings in County schools, including Genesee Elementary.

### **Genesee Elementary, Auburn Enlarged City School District –**

Genesee Elementary is a Title I School-Wide Plan building serving approximately 300 children k-5 (2010-2011), 360 children k-6 (2011-2012) and 370 children k-6 (2012-2013). The Title I, School-wide Plan designation allows the school to receive additional federal funding. The school is also required to construct a School-wide Plan designed to meet the educational needs of students and their families. A large part of the Genesee Elementary School-wide Plan is membership in the No Excuses University Network of Schools. No Excuses schools implement 6 exceptional systems in their schools. These systems include: *Culture of Universal Achievement, Collaboration, Curriculum Alignment, Assessment, Data Analysis, and Interventions*. Another requirement of the School-wide Plan is the coordination with federal, state and local agencies. The school's involvement with the *Brush to Crush* initiative meets the criteria for this requirement, and will be included as a formal part of Genesee's School-wide Plan as the partnership continues.

## Brush to Crush Cavities Program History

New York State Department of Health – Oral Health Indicators Report (2008) shows the prevalence of tooth decay in 3<sup>rd</sup> grade children to be 72.2% in Cayuga County. This is compared with New York State percentage being 54.1% and the United States percentage at 53%.

Based on oral health statistics gathered through the Cayuga County Health Department School- Based Preventive Dentistry Program, Genesee Elementary School was identified as a high needs school with a history of significant oral health issues in its students.

The Brush to Crush Committee was established in the Summer of 2010. Meetings took place with committee members to develop a plan to address the oral health issues of the students. Ron Gorney, School Principal was involved in the planning process and welcomed the program. Sandy Lalonde, School Nurse mentioned that many of her students have reported to her that they did not have toothbrushes of their own or at all.

A goal of this committee was to develop a model that would provide a more comprehensive intervention that would address the oral health issues children at Genesee Elementary were facing.

A pilot project, Brush to Crush Cavities was created. The emphasis of this program would be to incorporate daily brushing into the school day. Monetary donations and donations of supplies were sought. Supplies were purchased and some services were offered in-kind.

The 2010-2011 program would incorporate:

- Screenings (K, 1 & 2)
- Referral for treatment and follow-up
- In-class education by County Health Department Public Health Educators
- Daily brushing in school
- Reinforcement of brushing at various times throughout the year
- Sending children home with dental packs at the beginning and the end of the year

Since 2010, the Brush to Crush Cavities Program has continued to expand its services to provide screenings and education to all students in grades K-6 at Genesee Elementary School.

**Brush to Crush Cavities Program**  
**Year #1 Results**  
**September 2010 – June 2011**

In September 2010, a brochure and letter was sent home with all of the children notifying parents of the Brush to Crush Cavities Pilot Program. Parents of children in grade levels identified for being screened were asked to send a form back if they did not want their child to be screened. We used this reverse consent method which was recommended by school staff as this method was identified as working best for getting a response from parents at this school.

Screenings were performed on children in grades K, 1 and 2 at Genesee Elementary School in September by Joanne Elser, Dental Hygienist with the School-Based Preventive Dentistry Program (Cayuga County Health Department).

**Results of Screenings:**

- 115 children were screened
- Of the 115 screened, 63 (54.7%) had decay and needed treatment.
- Of the 63, with decay and needing treatment, 12 (19%) were identified as needing immediate care.
- Other information gathered through this screening was that 33 children (28.6%) had one or more fillings and 52 children (45.2%) had no decay or fillings.

The 12 children needing immediate care had an average of 8.75 cavities/child.

Follow-up was conducted by the School Nurse and Health Department staff. Genesee Elementary sent the screening information home and requested parents return the letter to notify the school of what they were doing about their child's teeth. There was very little response with letters being sent back, so Cayuga County Health Department staff called the families of the 12 students identified as needing immediate care. Our focus was to get these children in for care ASAP.

Follow-up was conducted on the other 51 children needing treatment after follow-up on the 12 immediate cases was conducted.

We found that there were four children who needed to be referred to Syracuse (1) and Rochester (3) for more extensive treatment. The parents of these children expressed their concerns for their children's oral health needs, but had limited means for transportation. While Medicaid will transport, they will not if the family has a car that is broken down. Paying for gas and taking time off from work to take their child were two big factors that parents considered.

In the future we would like to develop a plan, so that if this occurs again we will have a plan that outlines our role in providing transportation or reimbursement for gas.

**Brush to Crush Cavities**  
**Year #2**  
**September 2011 – June 2012**  
**Program Overview**

After year one of the pilot program we surveyed and spoke with school staff members at the teacher recognition luncheon to determine what their barriers were to implementing the daily brushing and any other issues they may have had with the program.

When asked what suggestions teachers had to improve this program, the answers included:

- Make sure new toothbrushes are given out at certain times during the year
- How are parents involved in the responsibility
- More sinks, link to lunch or breakfast
- Have kids do it at home and log it, get parents more involved
- Have supplies ready to go on the first day of school

One request was made to have the brushing supplies available the first day of school to make it easier to incorporate into the daily routine.

Monetary donations and donations of supplies were sought for year two of the program and the brushing supplies were available for all students on the first day of school.

In September the Cayuga County Health Department had a table at the Genesee Elementary Open House to promote the Brush to Crush Program amongst students, teachers and parents.

Also, in September oral health education including how to properly brush and floss was provided to each classroom at Genesee by Public Health Educators working at the Cayuga County Health Department. All students were able to participate in the oral health education sessions.



The committee realized that by only screening a few grades (K, 1 & 2) in the first year, we were not capturing the oral health status of all students. We also recognized that it would be difficult in tracking the oral health status of the students from year to year if we did not screen all students each year. Stipulations of the School-Based Preventive Dentistry grant prevented the committee from being able support the dental hygienist's time to screen all the students.

It was determined that the committee would seek funding to support the dental hygienist's time to screen the remaining grades. This school year was the first year that sixth graders would be housed in the elementary buildings due to the closure of West Middle School. Screenings would be performed on all students in grades K-6.

Funding was secured and screenings were performed in October 2011.

**Brush to Crush Cavities**  
**Year #2**  
**September 2011 – June 2012**  
**Screenings**

A brochure and letter was sent home with all of the children notifying parents of the Brush to Crush Cavities Program and that we were planning to screen all grades this year. Parents were asked to send a form back if they did not want their child to be screened. We used this reverse consent method which was recommended by school staff as this method was identified as working best for getting a response from parents at this school.

Results of the screenings:

- 265 students screened
- Of the 265 screened, 124 (46.7%) had decay and needed treatment.
- Of the 265, 13 (4.9%) were identified as needing immediate care.

This year we took a close look at the screening evaluations and included information on the students who were determined to be in need of better brushing.

- Of the 265 screened, 112 (42%) were identified as in need of better brushing.

We also decided to compare grade levels to determine what grades may be having more oral health problems. It was determined that 55.8% of second graders were identified as having a problem and 55.5% of sixth graders were identified as in need of better brushing. Please refer to the chart below for more information.

<b>Grade Level</b>	<b>Total # Screened</b>	<b>Total # with a Problem</b>	<b>% with a Problem</b>	<b>Total # in need of Better Brushing</b>	<b>% in need of Better Brushing</b>
<b>K</b>	37	14	37.8%	15	40.5%
<b>1</b>	46	22	47.8%	17	36.9%
<b>2</b>	43	24	55.8%	17	39.5%
<b>3</b>	30	15	50%	13	43.3%
<b>4</b>	42	17	40%	15	35%
<b>5</b>	34	15	44%	15	44%
<b>6</b>	36	17	47.2%	20	55.5%

**Brush to Crush Cavities**  
**Year #3**  
**September 2012 – June 2013**  
**Screenings**

This school year we welcomed Superintendent Constance Evelyn and Genesee School Principal Christian Maher to the Brush to Crush Cavities Committee. Having the support of both these individuals meant the program could continue for the third consecutive year.

For the second year in a row, we planned to screen all students in grades K-6. Information on the Brush to Crush Program was sent home and parents were asked to return a form back if they did not want their child to be screened.

Results of the screenings:

- 286 students screened
- Of the 286 screened, 126 (44%) had decay and needed treatment
- Of the 286 screened, 16 (5.6%) were identified as needing immediate care.

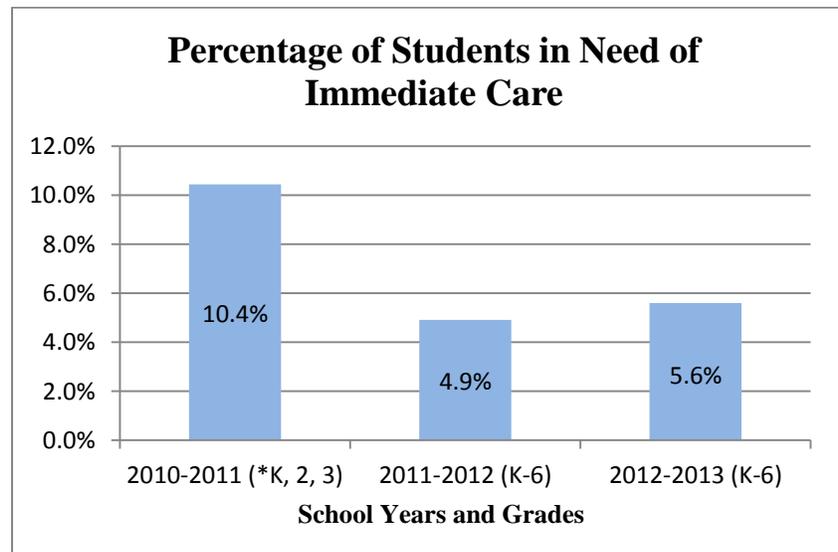
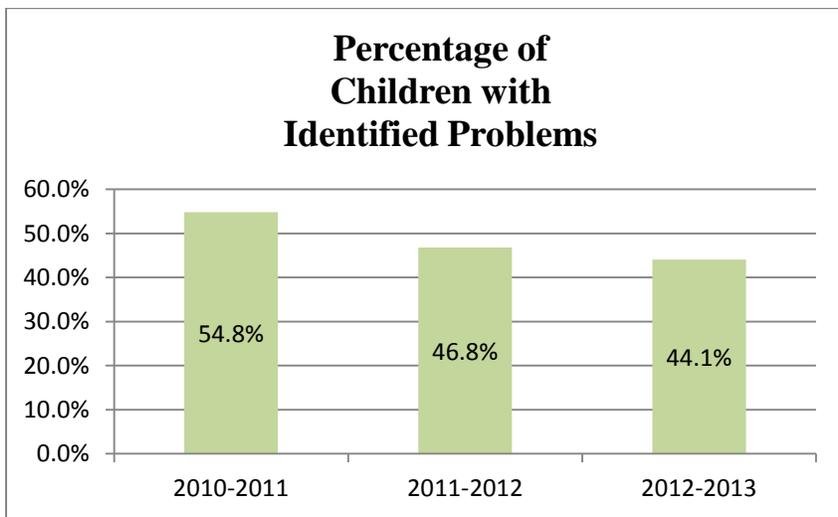
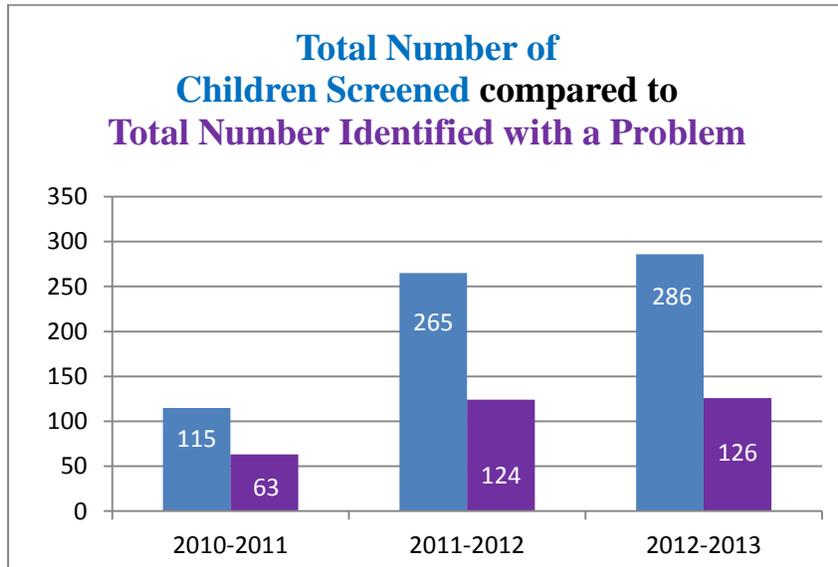
For a second year in a row we also took a close look at the number of students who were identified as in need of better brushing. This information is collected by the dental hygienist and reported on the screening evaluation forms.

- Of the 286 screened, 119 (41.6%) were identified as in need of better brushing.

We also compared grade levels to see which grades were having more oral health problems, so that more education could be provided to those grade levels. It was determined that **53.8 % of second graders were identified as having a problem** and **63% of fifth graders were identified as in need of better brushing.**

<b>Grade Level</b>	<b>Total # Screened</b>	<b>Total # with a Problem</b>	<b>% with a Problem</b>	<b>Total # in need of Better Brushing</b>	<b>% in need of Better Brushing</b>
<b>K</b>	51	23	<b>45.1%</b>	14	<b>29.4%</b>
<b>1</b>	41	19	<b>46.3%</b>	14	<b>34.1%</b>
<b>2</b>	39	21	<b>53.8%</b>	21	<b>53.8%</b>
<b>3</b>	38	18	<b>47.4%</b>	14	<b>36.8%</b>
<b>4</b>	35	10	<b>28.5%</b>	13	<b>37.1%</b>
<b>5</b>	46	19	<b>41.3%</b>	29	<b>63%</b>
<b>6</b>	36	16	<b>44.4%</b>	14	<b>38.9%</b>
<b>Total overall</b>	286	126	<b>44%</b>	119	<b>41.6%</b>

## Brush to Crush Cavities Three Year Progress Report



## **Brush to Crush Cavities**

### **Three Year Progress Report**

For the first year of this program funding allowed us to screen only children in grades, K, 2 and 3. Funding was secured for year two and three to screen children in grades K-6.

Each year of this program we have seen an increase in the number of children being screened at school. As we screened more children we anticipated finding more problems, but in reality the percentage of children identified with problems has gone down over the past three years. This could be attributed to providing education and supplies needed for the children to properly care for their teeth. Daily brushing at school provides an additional opportunity for children to brush their teeth each day. In addition to the school-kits we have provided each child with a take-home kit multiple times each year.

Overall, we have seen a decrease in the percentage of children identified as in need of immediate care.

This multi-faceted community-based approach to addressing the oral health of children in our community has proven successful at Genesee Elementary School. We recognize this program requires that school administrators and staff make time in their day to allow for the daily brushing, annual screenings and education to occur. Without their support this program would not be a success.

Having piloted this program at Genesee Elementary for three years, has allowed us to work out the details, overcome challenges and improve the program each year.

The Brush to Crush Committee now feels that we are prepared to expand this program to an additional high-needs school for the 2013-2014.

## Brush to Crush Cavities Casey Park – Spring 2013

Recognizing there was a need for the Brush to Crush Program to be expanded to Casey Park, it was important that some baseline information was collected prior to implementing this program. Oral health screenings were conducted and parent surveys were distributed.

The baseline oral health screening was conducted in the Spring. The purpose of this was to give us a starting point and identify where there were significant issues. The results of the screenings are included below. Overall, 55% of students screened were identified as having a potential problem or in need of immediate care. When the information is broken down by grade levels, it was determined that third, fourth, and fifth grades had the highest percentage of immediate care cases. Looking at the brushing habits of children was also alarming with 69% of students identified as in need of better brushing.

Grade Level	Total # Screened	Total # with a Problem	% with a Problem	# of Immediate Care	% of Immediate Care	Total # in need of Better Brushing	% in need of Better Brushing
<b>K</b>	93	43	46.2%	1	1.1%	46	49.5%
<b>1</b>	74	32	43.2%	6	8.1%	51	68.9%
<b>2</b>	66	30	45.5%	3	4.5%	45	68.2%
<b>3</b>	64	30	46.8%	6	9.4%	53	82.8%
<b>4</b>	28	17	60.7%	3	10.7%	24	85.7%
<b>5</b>	58	31	53.4%	5	8.6%	47	81%
<b>6</b>	57	32	56.1%	3	5.3%	38	66.6%
<b>Total overall</b>	440	215	49%	27	6.1%	304	69%

## **Brush to Crush Cavities** **Casey Park – Spring 2013**

The parent survey was distributed to assess their thoughts, feelings, beliefs and habits of their children's oral health as well as their own.

Results of the parent survey show that some parents indicated that their child missed school because of tooth pain. Most parents indicated that they have taught their children to brush their teeth. Some parents mentioned they have trouble getting their children to brush their teeth.

Overall, parents expressed concern for the dental health of children and seemed to be in support of the Brush to Crush Program being implemented at Casey Park next school year.

Additional survey questions and results can be found on the next two pages.

**Brush to Crush Cavities**  
**Casey Park – Spring 2013**

1. Please list the age and grade level for each child you have attending Casey Park.

4yrs – 0	9yrs – 8
5yrs – 9	10yrs – 3
6yrs – 12	11yrs – 5
7yrs – 8	12yrs – 6
8yrs – 7	

K – 17	4 <sup>th</sup> – 3
1 <sup>st</sup> – 7	5 <sup>th</sup> – 8
2 <sup>nd</sup> – 8	6 <sup>th</sup> – 5
3 <sup>rd</sup> – 11	

2. Have you taught your child or your children to brush their teeth?

YES – 49  
NO – 0

3. Does your child or do your children brush their teeth at home?

YES – 47  
NO – 0  
Sometimes - 2

4. Do you have trouble getting your child or children to brush their teeth at home?

YES – 12  
NO – 34  
Sometimes – 2

5. How often does your child or children brush their teeth each day?

Never – 0	Once a day – 16
Twice a day – 31	More than twice a day – 2

6. Has your child or have your children been to the dentist in the last year?

YES – 45  
NO – 2  
I don't know – 1  
Can't remember – 1

(If you answered YES, then skip question #7 and go to #8. If you answered NO, please answer question #7)

7. Why hasn't your child or children been to the dentist this past year?  
No dental insurance – 1      No transportation  
No dentist – 1      Other: Missed appointment, I don't know  
NA – 45

8. Does your child or do your children have cavities?  
YES – 13  
NO – 27  
No answer – 9

9. Has your child or children missed school because of tooth pain?  
YES – 4  
NO – 45

**Questions 10 –15 Tell us your thoughts, feelings and beliefs about dental care in your family.**

10. When was your last visit to the dentist?  
Within the last 6 months – 37      Within the last year – 8  
Over a year ago – 2      Over 5 years ago – 0  
Over 10 years ago – 0      Can't remember – 1  
No answer – 2

11. If you have not been to the dentist within the last year, why not?  
No dental insurance – 1      No transportation  
No dentist – 1      Other: \_\_\_\_\_  
NA – 43      No answer – 2

12. Are you concerned with the dental health of:  
Your child/children – 20      Yourself – 8      Others – 10  
No answer – 21      No – 1

13. Do you brush your teeth, while your child or children watch you?  
YES – 35  
NO – 11 (one parent answered No, because they have dentures)  
No answer – 3

14. Would you support the City of Auburn adding fluoride to the water supply in an effort to prevent tooth decay and cavities?  
YES – 44      Maybe – 1  
NO – 1      No answer – 3

15. Would you support Casey Park starting a brushing program at school for students?  
YES – 46  
NO – 1  
No answer – 2

## **The Future of Brush to Crush Cavities Program**

For the 2012-2013 school year, we welcomed two new faces to the Brush to Crush Cavities Program, Auburn Enlarged City School District Superintendent Constance Evelyn and Genesee Elementary Principal Christian Maher. With their support the program continued at Genesee Elementary for the third year in a row.

Based on information provided in this report, the Brush to Crush Cavities Program has proven to be a successful model for elementary school-aged children. After our baseline assessment of the oral health of students at Casey Park Elementary, the identified oral health needs of students is apparent. Implementing this program at Casey Park is important in order to improve the oral health of Casey Park students.

We are fortunate to have the continued support of Principal Ron Gorney who is now at Casey Park Elementary. Ron is very familiar with the Brush to Crush Cavities Program and sees the need for this program and the benefits of having this program offered at his school.

In order to continue the Brush to Crush Cavities Program at Genesee Elementary and expand to Casey Park, we need additional funding and donations of supplies.