

### *Acknowledgements*

On behalf of the Department of Health and Human Resources, Bureau for Public Health, Office of Maternal, Child and Family Health, Oral Health Program is appreciative for the opportunity to continue to serve the citizens of West Virginia. One of the goals of the Oral Health Program is to monitor the oral health of the residents of the State, and the completion of this survey aids the Program in accomplishing that goal.

This project was made possible by the U.S. Department of Health and Human Services (HHS) Level One Establishment Grant funding by virtue of a memorandum of understanding with the West Virginia Offices of the Insurance Commissioner. Much credit is given to all of the survey participants. Thank you for your precious time and insightful comments. Thanks to Repass & Partners for conducting the survey. Additionally, the Oral Health Program would like to thank the Oral Health Advisory Board, West Virginia Oral Health Coalition, and all community partners who have supported the Program in efforts to promote and improve the oral health of all West Virginians.

Jason M. Roush, DDS  
State Dental Director  
December 2012



*Improving health, one smile at a time.*

West Virginia Department of Health and Human Resources

## Oral Health Consumer Survey Report, 2012



### Objectives

- ⇒ Determine the number of people in West Virginia who have dental insurance and what type of insurance they have;
- ⇒ Develop a better understanding of the landscape of dental care in West Virginia; and
- ⇒ Gather data that will assist in the development of population specific programs and messaging to meet the needs of the State.

### Introduction

Oral diseases are progressive and can affect how an individual looks, as well as the ability to eat and communicate with others. These diseases can also affect a person's ability to work at home, at school, or on the job. However, many adults lack dental insurance and financial resources, limiting their ability to seek regular dental services.<sup>1</sup>

According to the U.S. Department of Health and Human Services, employed adults lose more than 164 million hours of work each year due to dental disease or dental visits.<sup>2</sup> Additionally, for every adult 19 years or older with medical insurance, there are three without dental insurance.<sup>2</sup>

As stated in the 2010 West Virginia Oral Health Plan, West Virginia has the highest rate of tooth loss in adults age 65 and older in the nation. With a state that ranks almost last in median income and a high rate of poverty, residents do not rate seeing a dentist as a top priority. Moreover, government health care plans and private employers often do not offer adequate dental insurance coverage. For example, Medicaid fully covers children up to age 19 but only covers extractions to alleviate pain and suffering for those adults under Medicaid.<sup>1</sup>

With this in mind, the 2012 *Oral Health Consumer Survey* was designed to gain insights from West Virginians about their dental care, dental care utilization, and dental insurance coverage. The research aims to provide information that will help health care providers develop a better understanding of the landscape of dental care in West Virginia as well as assist with developing appropriate programs and messages that meet the needs of the State.

### Methods

The 2012 *Oral Health Consumer Survey* is a representative sample of West Virginia adults. This 40-question survey was conducted in April 2012 by Repass & Partners of Cincinnati, Ohio. A multi-modal methodology that involved both telephone and online surveys was utilized during the survey thus resulting in interviews with a broader base of respondent ages, income and other demographics. The 510 survey respondents were reflective of the demographics of the population of West Virginia, meeting the criteria of being residents of West Virginia and 18 years or older. The data was adjusted to take into account the complex sampling scheme and non-response.

# Oral Health Program

Data analysis, which included frequencies and 90 % confidence intervals, was completed using SAS (statistical analysis system) version 9.3.

## Results

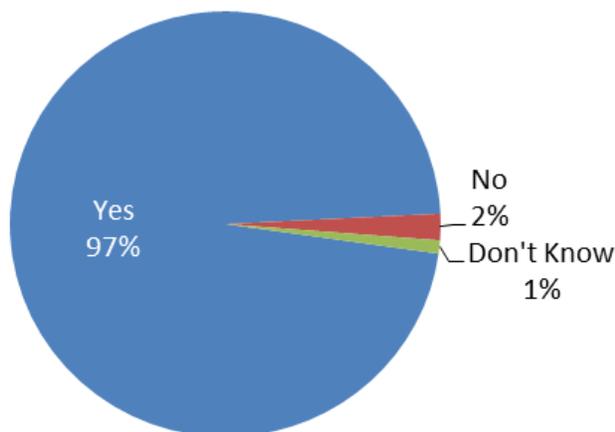
The findings from the 2012 *Survey* are divided into three sections:

1. Attitudes Regarding Dental Care
2. Personal Dental Habits/History
3. Respondent Demographics

### Attitudes Regarding Dental Care

There was a broad agreement among the respondents (97%) that oral health can affect the overall health of an individual.

*Percent of West Virginians Who Believe that Oral Health Can Affect Their Overall Health*



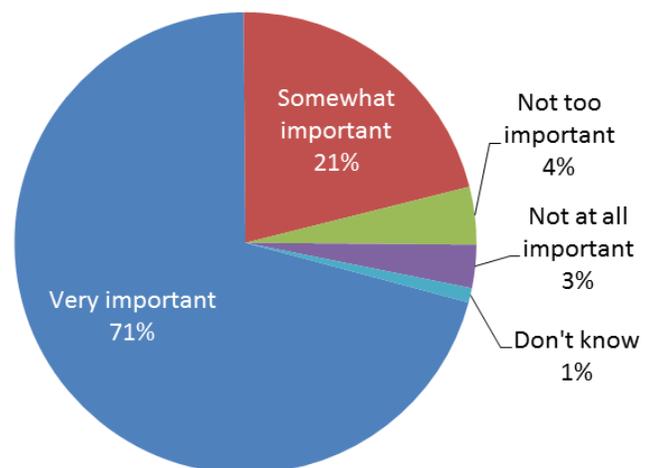
There have been several studies to demonstrate the link between chronic oral health issues and overall adverse health complications. Inflammatory periodontal disease has been linked to multiple systemic conditions including diabetes, cardiovascular disease, osteoporosis, preterm/low birth weight infants, respiratory diseases, and rheumatoid arthritis.<sup>3</sup>

According to the Institute of Medicine report, *Advancing Oral Health in America*, "there is mounting evidence that oral health complications not only reflect general health conditions, but also exacerbate them."<sup>3</sup>

Preventive dental care is important to maintain a healthy mouth and body. Visiting the dentist twice a year is recommended, although some patients may be required to visit more frequently. The survey demonstrates a general agreement about the importance of regular dental care. Over 90% of consumers indicated that it is somewhat or very important. Females (95%) assigned even higher importance to regular dental care than males (87%), while those over 65 (83%) assigned lower importance than younger respondents (96%).

The bulk of consumers agreed about the importance of regular dental care, but the vast majority of consumers (83%) believe that regular dental care is expensive.

*West Virginians Beliefs about the Importance of Regular Dental Care*



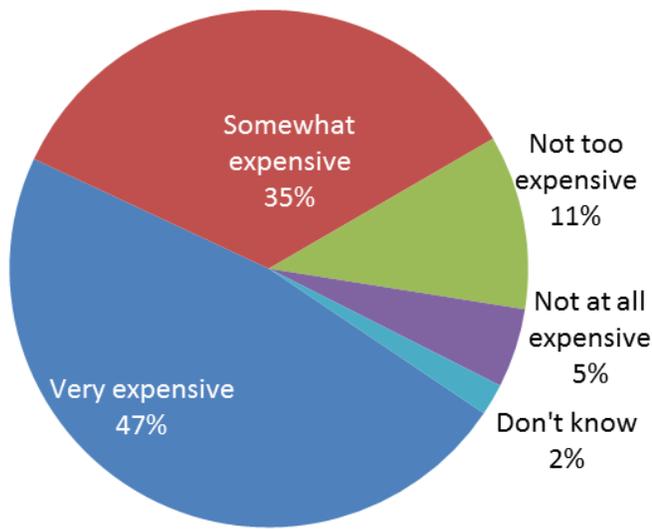
West Virginia has the highest rate of tooth loss in adults age 65 and older in the nation, with 36% having had all of their teeth extracted, which is nearly 20% higher than the national average.<sup>5</sup> This high rate of tooth extraction in older adults may be an indication as to why older adults in West Virginia do not value regular dental care. On the other hand, a study conducted on inequalities in regular dental attendance suggested that in European countries, socioeconomic disparities and education level played more of a role in regular dental attendance over the course of the life span,<sup>6</sup> instead of age.

# Oral Health Program

A survey conducted by the Kaiser Family Foundation found that low-income families do not receive regular dental care due to cost and lack of dental insurance coverage.<sup>7</sup> There is a clear indication that West Virginians value good oral hygiene but lack the appropriate means to maintain preventive dental visits. The majority of the children in the State receive dental insurance coverage through West Virginia Medicaid or West Virginia Children's Insurance Program (CHIP). Neither of these programs are available for preventive dental visits after the age of 19. Adults who lack dental coverage are covered through West Virginia Medicaid for emergency dental services but not for routine cleanings and other prevention strategies. Many oral health issues are preventable with good daily oral hygiene practices and regular visits to a dental office.

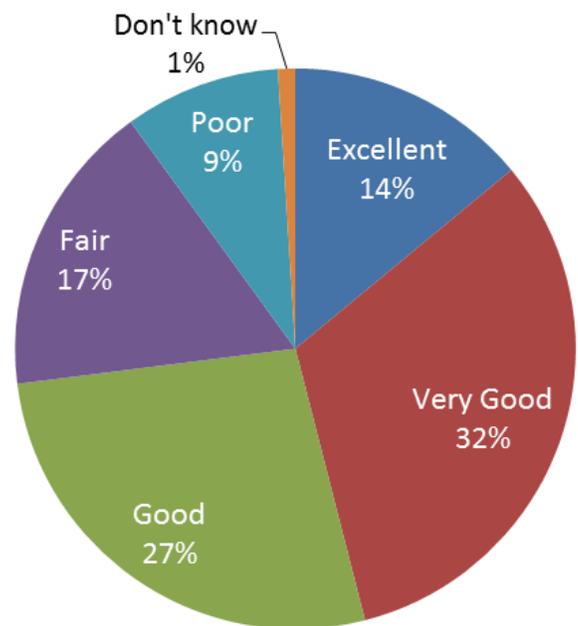
The cost of dental services and lack of dental coverage for adults create a barrier for this population to access the much needed dental services available throughout the State.

*Attitudes of West Virginians Regarding the Cost of Regular Dental Care*



About one-fourth (26%) of West Virginians considered their oral health to be fair or poor. This is comparable to the national average of (24.4%) American's who consider their oral health to be fair or poor.<sup>8</sup> On the other hand, 52% of women and 64% of young people perceived their dental health as excellent or very good compared to 38% of men and 38% of older respondents respectively. Additionally, perceived dental health was better among respondents with higher education (64%) compared to lower education (16%). The Centers for Disease Control and Prevention (CDC) also suggest a positive correlation between education and oral health status.<sup>8</sup>

*How West Virginians View Their Current Dental Health*



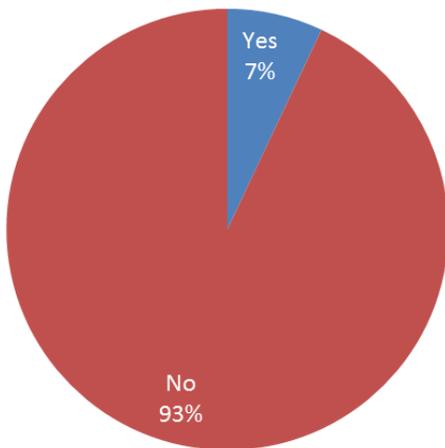
At this moment, there is no adult surveillance system in place in West Virginia to compare perceived oral health status to actual health status. A surveillance system is currently being developed by the West Virginia Oral Health Program that will provide a baseline and in time, comparable data that can be used to ascertain the actual oral health status of individuals statewide.

# Oral Health Program

## Personal Dental Habits/History:

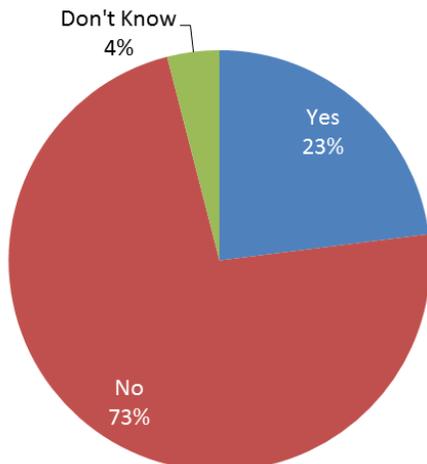
Nearly one in every ten West Virginians (7%) missed work or school due to dental problems. Dental problems can cause pain in the face and mouth, as well as create issues with speech, chewing and swallowing. The Division of Oral Health at the CDC states that “employed adults lose more than 164 million hours of work each year due to oral health problems or dental visits.”<sup>9</sup> Time away from work due to dental problems can result in decreased productivity.

*Percentage of West Virginians Who Missed Work Due to Dental Problems*



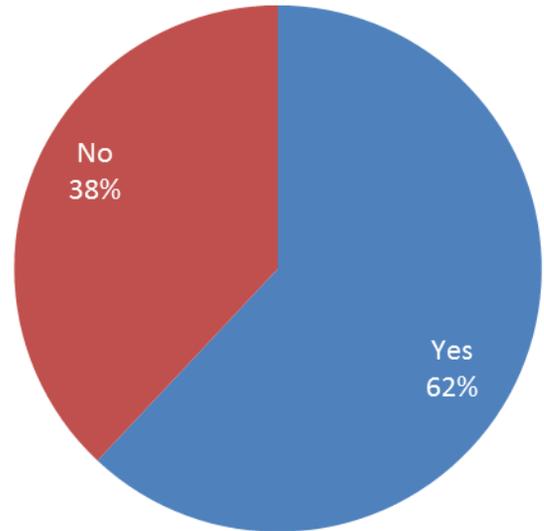
About one in four West Virginians (23%) had cavities that have not been treated, with more females (27%) than males (19%) indicating they had untreated cavities.

*Percentage of Untreated Cavities Among West Virginians*



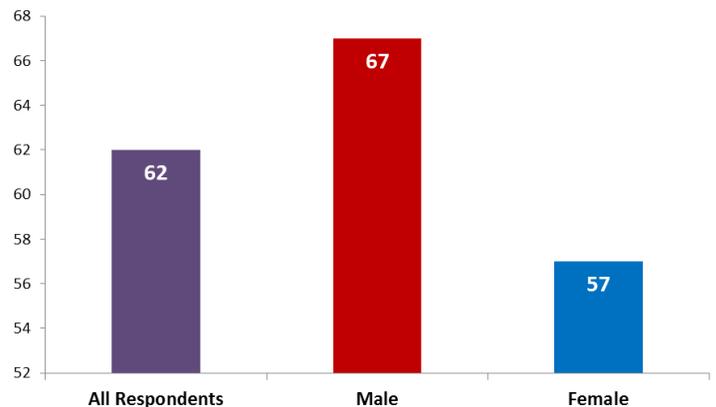
Nearly two-thirds of West Virginians (62%) had lost at least one of their permanent teeth.

*Percentage of West Virginians Who Have Lost at Least One of Their Permanent Teeth*



Additionally, tooth loss was more likely among men (67%) than women (57%), older (79%) rather than younger (14%), respondents and consumers with lower education (90%) compared to those with higher education (39%). In the United States, 16% of adults report that they have had unmet dental needs within the past year due to cost of dental care.<sup>8</sup>

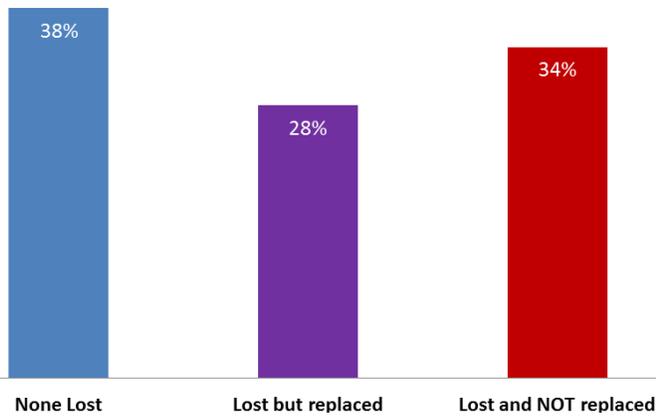
*Percentage of Tooth Loss Among Men and Women in West Virginia*



# Oral Health Program

According to the results of this study, 62% of West Virginia residents have lost at least one of their permanent teeth. The percentage of respondents who have lost at least one permanent tooth increased with age, and men were 10% more likely than women to experience this phenomena. Of those who lost permanent teeth, one third (34%) have not had them replaced.

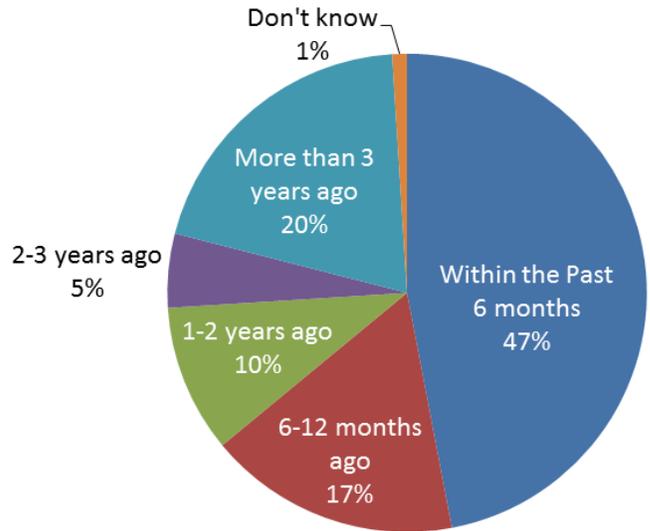
*Percentage of West Virginians Who Have Lost and Replaced their Permanent Teeth*



Missing or broken teeth can have an effect on individual confidence and employability. The Pre-Employment Project offered through the Oral Health Program provides dentures or partials for low income senior citizens and adults with disabilities deemed eligible under the Program's guidelines. This project has helped nearly 450 clients in Fiscal Year 2012, and there continues to be a waiting list by county for these services.

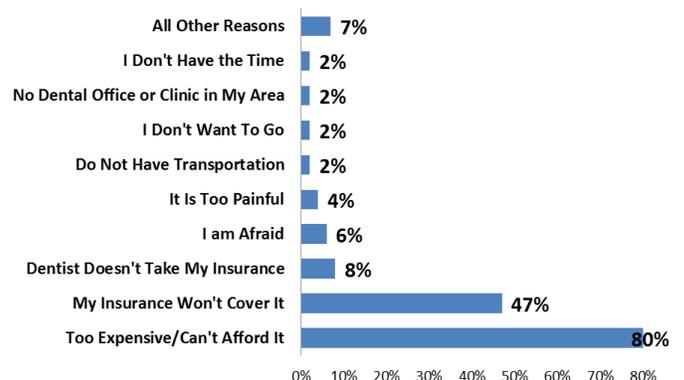
As mentioned previously, visiting the dentist twice a year is recommended for adults. However, one in five respondents had not seen a dentist in more than three years, with 35% having not seen a dentist in one or more years. Among those who did make regular dental visits, two-thirds did so because of the importance they placed on dental care.

*Percentage of West Virginians Who Have Gone to the Dentist Within the Past 6 Months*



The primary reasons stated by West Virginians who did not make regular dental visits were cost (54%) and lack of insurance (16%). In addition, cost (80%) and inadequate insurance coverage (47%) were also the top reasons cited by consumers for not being able to receive the dental care that they needed. In 2008, it was indicated that 41.7% of Americans do not receive needed oral care due to cost and lack of dental insurance coverage.<sup>8</sup> One in three West Virginians needed dental care but were unable to receive the care that they needed. Females and West Virginians ages 25-54 were more likely to have needed but not received dental care.

*Reasons Cited by West Virginians for Not Receiving the Dental Care they Need*

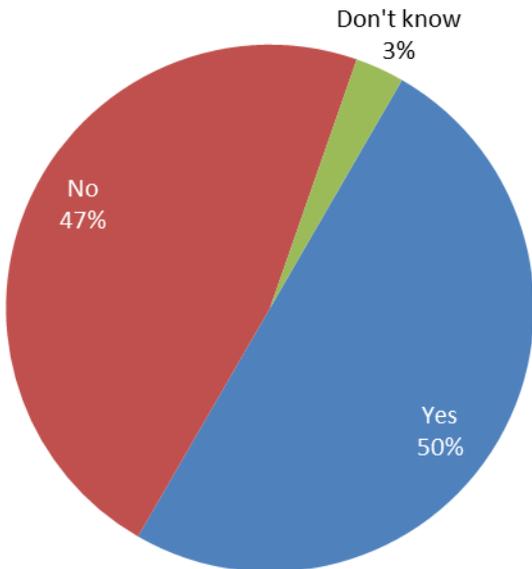


\*Respondents permitted to select multiple reasons

# Oral Health Program

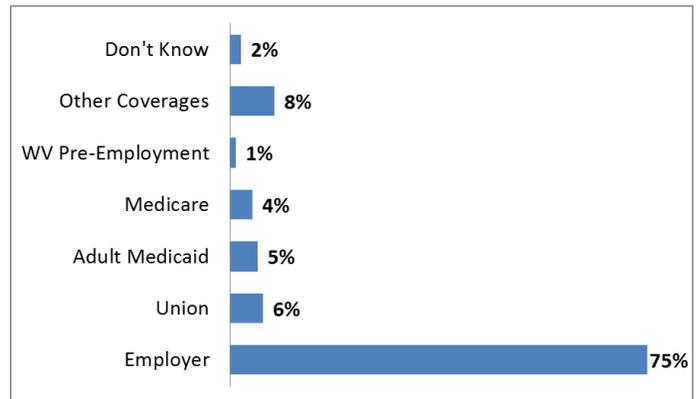
Almost half of West Virginians (47%) have no dental insurance. Respondents age 65 and older were least likely to have insurance with a mere 27% having insurance. This study identified that dental insurance is mostly provided through employers, which may help to explain why those over 65 have such a low rate of dental coverage. According to the Kaiser Family Foundation, 77% of West Virginia residents age 65 and older are on Medicare.<sup>10</sup> Respondents with lower education levels were also less likely to have dental insurance with only 36% having insurance.

*Percentage of West Virginians with Dental Insurance*



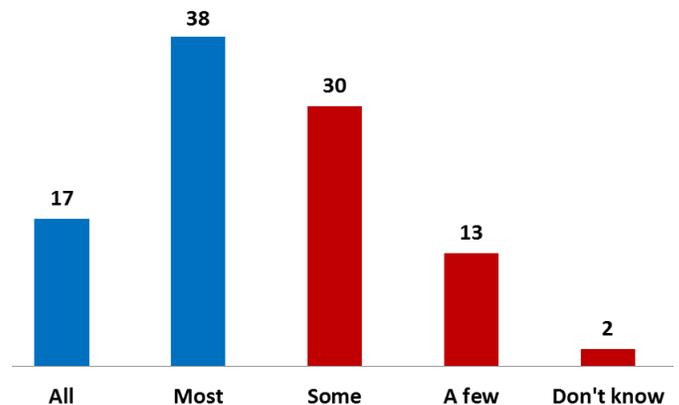
Among those who did have dental insurance, 75% were covered through their employer. Other sources of dental insurance for respondents includes through an employee union (6%), adult Medicaid (5%), Medicare (4%), West Virginia Pre-Employment Project(1%), and various coverages. Although 53% were insured, one-third (31%) of insured respondents don't know how much they pay as a deductible.

*Sources of Dental Insurance Cited by West Virginians*



The vast majority of respondents (79%) said that their dental insurance covered preventive services while one in five said their insurance didn't cover preventive services or that they did not know what was covered. More than four out of ten adults (43%) believed their dental insurance only covered some or a few of their dental needs.

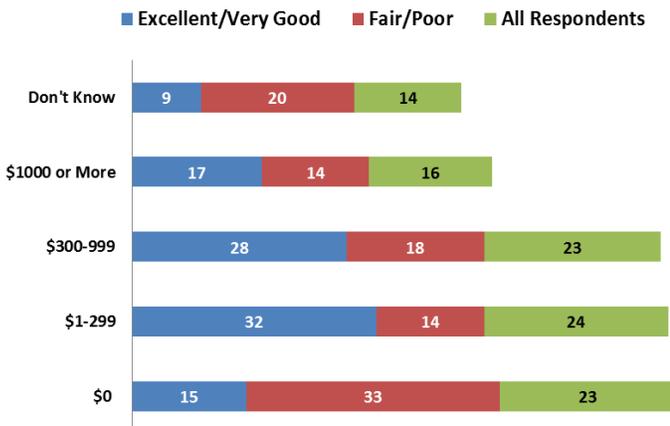
*West Virginians Perceptions of What Their Dental Insurance Covers*



# Oral Health Program

In addition, more than one in six adults (17%) claimed that it was somewhat difficult or very difficult to find a dentist who accepts their insurance.

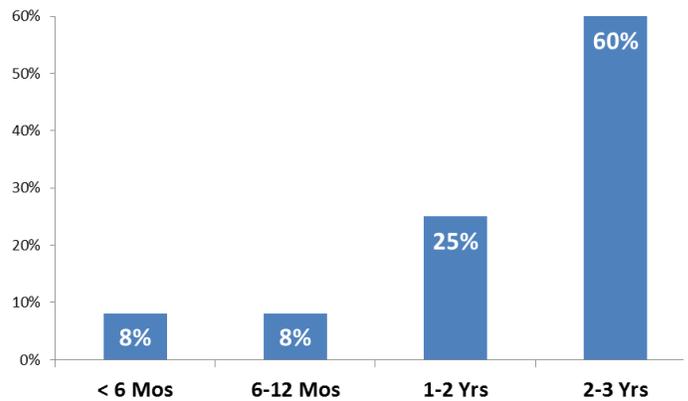
Those without dental insurance were more likely to spend nothing or have no out-of-pocket spending on dental care in the past year. About one-fourth of West Virginians (23%) spent nothing on dental services in the past 12 months. Those who described their health as fair or poor also spent nothing on dental services.



*Dental Spending Among West Virginians Who Described Their Oral Health as Poor or Fair*

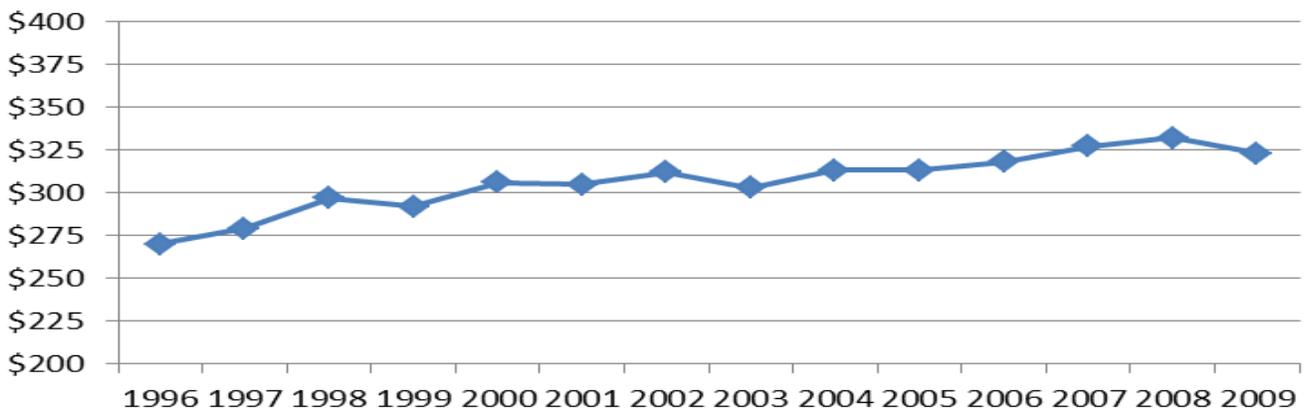
Zero dental spending coincides with less frequent dental visits. Sixty percent (60%) of respondents who spent nothing on dental care had not seen a dentist in two or more years.

*Percentage of West Virginians with NO Dental Spending by Most Recent Dental Visit*



According to the National Health Expenditure Report, 104.8 billion dollars was spent on dental services in 2010.<sup>11</sup> This accounts for total spending among all pay sources, public and private, for dental services. The American Dental Association states that out-of-pocket dental expenditures account for 22% of total health expenditures and that the out-of-pocket expense for 2009 was 323 dollars per person.<sup>12</sup> The graph below indicates the steady increase in out-of-pocket spending on dental care for consumers.

## Per Patient Out-of-Pocket Dental Costs

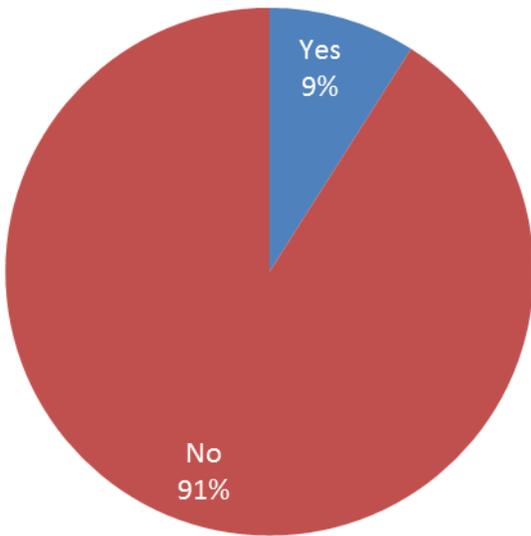


Source: National Health Expenditures (NHE) Data by Type of Expenditure and Source of Funds: Calendar Years 1997-2009

# Oral Health Program

When asked if they had ever gone to the emergency room of a hospital for dental care, one in ten West Virginians responded that they had indeed gone to an emergency room for dental care and that prescriptions for antibiotics or pain were the main services received during said visit.

*Percentage of West Virginians Who Have Gone to the ER for Dental Care*



## Respondent Demographics

Ninety-nine percent (99%) of respondents were of non-Hispanic origin. Ninety-six percent (96%) of consumers were white, 2% were African American or Black, with 2% preferring not to say or describing themselves as something else. Twelve percent (12%) of respondents had graduate/professional degrees, 15% had bachelor degrees, 6% had associate degrees, 20% went to some college, 8% of respondents were technical school graduates, 33% were high school graduates, and 6% had no high school degree. The median age of respondents was 55.1. Sixteen percent (16%) of consumers were under 35, 16% were 35-44, 18% were 45-54, 25% were in the 55-64 age range, and 25% of consumers were 65 and over.

*Table 1: Age, Gender, Race/Ethnicity and Education Level of Respondents*

Variable	# of Respondents	% of Respondents
<b>Total</b>	510	100
<b>Gender</b>		
Male	229	44.9
Female	281	55.1
<b>Race / Ethnicity</b>		
White	487	96
Black	11	2
Prefer not to say/	12	2
Other		
<b>Age</b>		
18-24	22	4.3
25-34	57	11.2
35-44	83	16.3
45-54	91	17.8
55-59	77	15.1
60-65	52	10.2
65+	128	25.1
<b>Education</b>		
Some HS / Less	31	6
High School Grad	169	33
Tech/some coll. or	172	34
Associate degree		
College Grad	76	15
Grad/prof degree	59	12

### Conclusion

West Virginians generally viewed dental health as important with nine out of ten people saying that regular dental care is somewhat or very important. Further, almost all agreed that oral health affects overall health. Although consumers believed that regular dental care is important, about a quarter described their oral health as being fair or poor. In addition, two-thirds of West Virginians had lost at least one permanent tooth, and one-third lost a permanent tooth which has not been replaced.

Lack of dental insurance was a major impediment cited by consumers. Only half of West Virginians have dental insurance. Of those with dental insurance, most received it via their employer, but interestingly, one-third did not know how much they pay as a deductible. A quarter of consumers had not seen a dentist in 2 or more years, citing costs as the primary reason.

The West Virginia Oral Health Program recognizes the needs identified by the results of this survey and will continue working towards meeting these and other needs using the State Oral Health Plan as a guide.

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