

# Utah Health Status Update:

## Oral Health Status Among Utah Children

June 2006

Utah Department of Health

Dental decay is the most common chronic disease affecting children in the U.S. Among youth ages 5 to 17, the prevalence of dental caries occurs five times more than asthma, and seven times more than hay fever. The Surgeon General's report, *Oral Health in America*, emphasizes the importance of this silent epidemic that is hitting American children hard. The report advocates greater awareness of the importance of oral health and its role in general health and well-being.

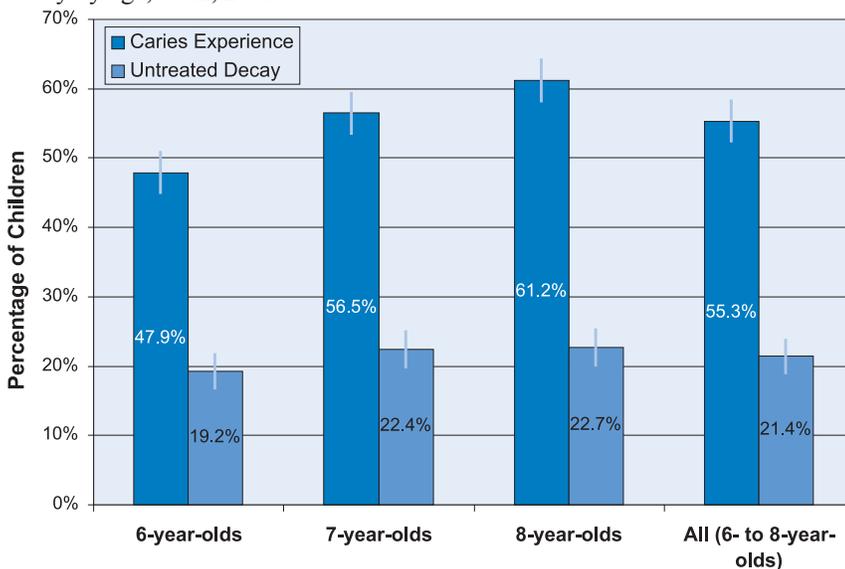
In order to assess the oral health status among Utah school-aged children, the Oral Health Program (OHP) conducted a statewide dental survey in the fall 2005. The survey was administered using Association of State and Territorial Dental Directors (ASTDD) screening protocol. Nearly 1,200 children in grades one through three from 28 public elementary schools throughout the state were screened. The survey collected information on caries history, untreated decay, treatment needs, sealant utilization, and access to dental care (e.g., insurance type, length of time since last dental visit, and unmet dental needs). Seven elementary schools were unable to participate in the 2005 survey. The data have been weighted to account for sampling methodology. This report presents the key findings from the survey for children six through eight years of age (n = 1,086). Comparisons are made to the prior 2000 Dental Survey and national Healthy People 2010 oral health objectives.

### Caries Experience

Caries experience means that the child had active tooth decay or fillings in primary or permanent teeth. The survey demonstrated that a substantial number of Utah children still suffer from this preventable disease. More than half of children between six and eight years of age (55.3%) had experienced caries. Prevalence of caries increased with age (see Figure 1). Among eight-year-olds, 61% had experienced caries. The comparison of 2000 and 2005 dental survey indicates an

### Children's Oral Health Status by Age

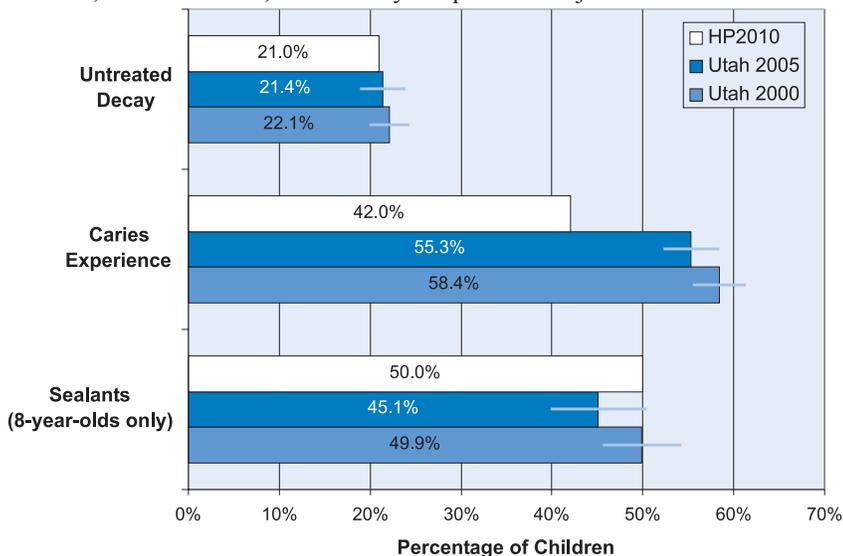
Figure 1. Percentage of children with caries experience and with untreated decay by age, Utah, 2005



Source: Utah Dental Survey 2005

### Oral Health of Utah Children vs. HP2010 Objectives

Figure 2. Percentage of children with untreated decay, caries experience, and sealants, 2000 and 2005, and Healthy People 2010 objectives



Source: Utah Dental Surveys 2001 and 2005

improvement in caries prevalence. The percentage of children having caries experience decreased slightly, from 58% in 2000, to 55% in 2005. However, this rate is still substantially higher than the Healthy People 2010 objective of 42% (Figure 2).

### Untreated Decay

Overall, more than one in five children (21.4%) had untreated caries. Utah came close to meeting the national goal for the percentage of children with untreated caries (21.4% vs. 21.0%, Figure 2).

Children who had been to the dentist in the last six months were less likely to have untreated decay than those who had not (16.0% vs 51.2%, Figure 3). Almost 25% of children had no dental insurance in 2005. Children with private insurance were less likely to have untreated caries.

### Treatment Urgency

Almost 3% of Utah children had urgent treatment needs. This represents about 3,600 children who were attending school with dental pain/infection and were in need of urgent dental care. Urgent dental needs have been defined as dental pain, abscess, or extensive decay.

There were persistent disparities in oral health among ethnic groups. The survey showed that Hispanic/Latino children were more likely to have dental caries and to be in need of urgent care than non-Hispanic children (Figure 4).

### Sealants

Dental sealants are very effective in preventing caries and thus can significantly reduce the risk for untreated decay. However, sealants remain underused. In Utah, only 45% of eight-year-old children screened had dental sealants (Figure 2).

### Summary

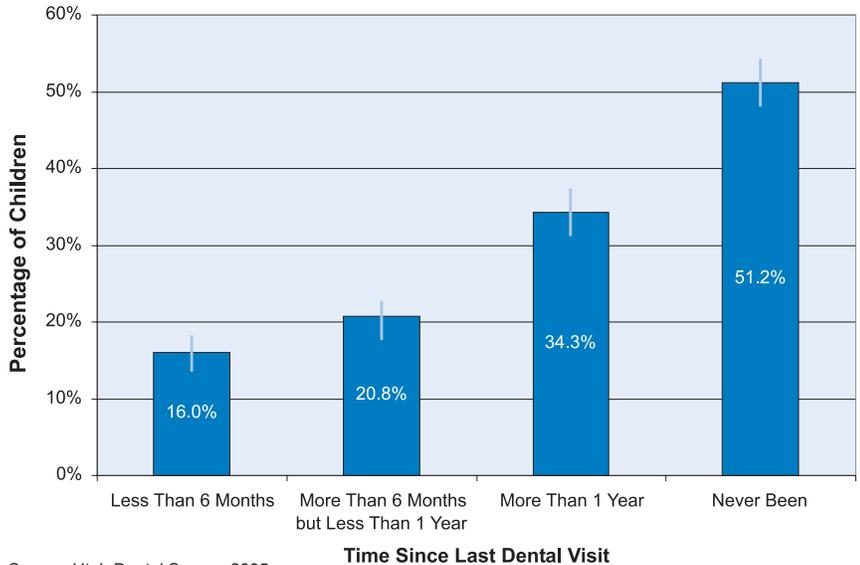
There has been little change in prevalence of untreated decay between the surveys. While the prevalence of caries experience has declined since 2000, it still remains a significant public health problem even more so for certain ethnic groups.

### Recommendations

Tooth decay is a preventable disease. The OHP promotes dental decay prevention methods such as fluorides, sealants, and early childhood caries intervention. The OHP also collaborates with its partners in the Mind Your Mouth public awareness campaigns emphasizing the benefits of early and regular visits. The OHP works closely with the Utah Oral Health Coalition to increase the number of dentists willing to see Medicaid participants and to expand current outreach programs.

### Untreated Dental Decay by Time Since Last Visit

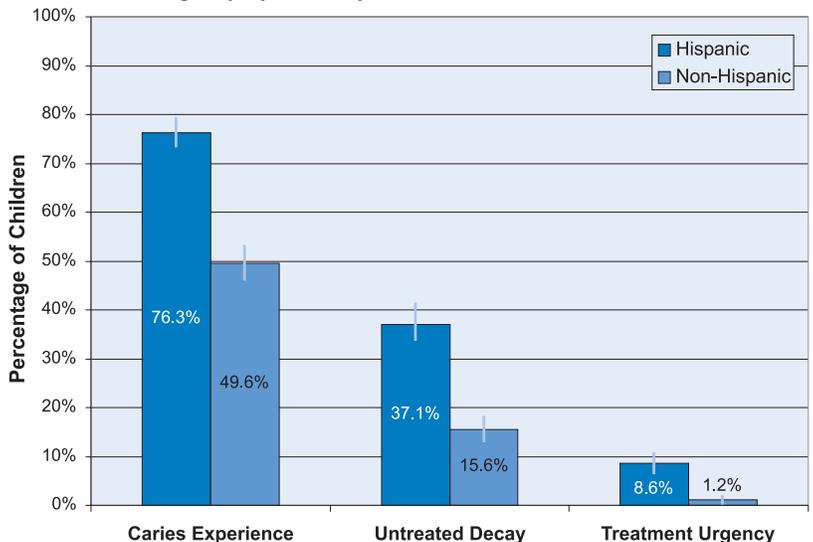
Figure 3. Percentage of Utah children with untreated dental decay by time of last dental visit, Utah, 2005



Source: Utah Dental Survey, 2005

### Oral Health Status of Children by Ethnicity

Figure 4. Percentage of Utah children with caries experience, untreated decay, and treatment urgency by ethnicity, Utah, 2005



Source: Utah Dental Survey, 2005

## June 2006 Utah Health Status Update

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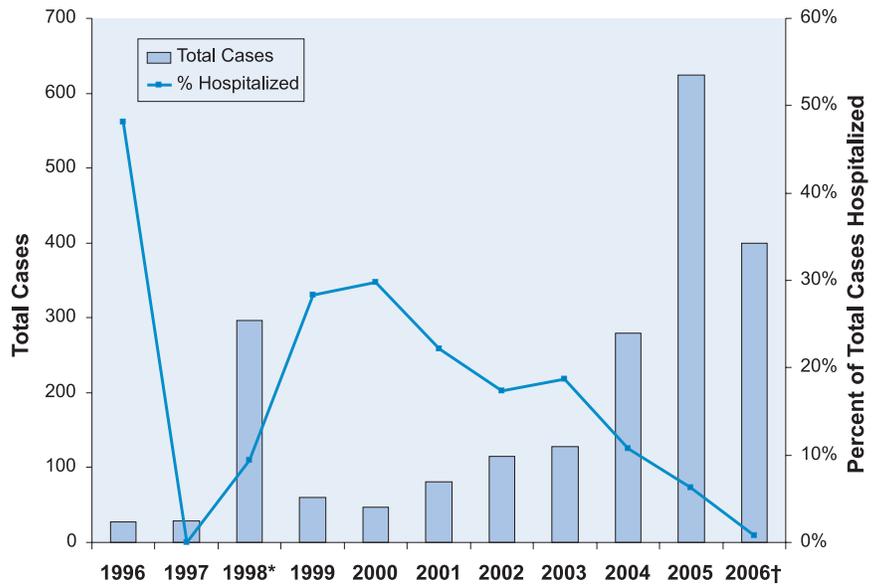
## Breaking News, May 2006

### Trends in Pertussis Activity, Utah, 1996-2006

From Jan. 1996 to May 2006, a total of 2,087 cases of pertussis were reported to the UDOH. A 15-fold increase in reported cases has occurred during this time period. This increase in cases in the last decade has primarily been observed in adolescents and adults. These individuals are believed to become susceptible to pertussis approximately 6–10 years after childhood vaccination. Although the disease is typically mild in older persons, pertussis can cause severe disease in infants. Many adults and adolescents do not realize that they can transmit the disease to infants who are too young to be fully vaccinated.

During Jan. 1996–May 2006, 206 pertussis hospitalizations were reported to the UDOH. During the early 1990s, pertussis reporting was primarily limited to hospitalized cases. Since 1999, the percentage of reported hospitalizations has decreased. This suggests that the dramatic increase in cases may not necessarily be due to increasing severity, but is more likely related to improved case recognition. Since 1996, 80% of all reported hospitalizations have occurred in infants under one year. New vaccines targeting older age groups are expected to reduce cases in these age groups, and also reduce transmission to infants.

**Number of reported pertussis cases and percent total hospitalized, by year, Utah, 1996-2006**



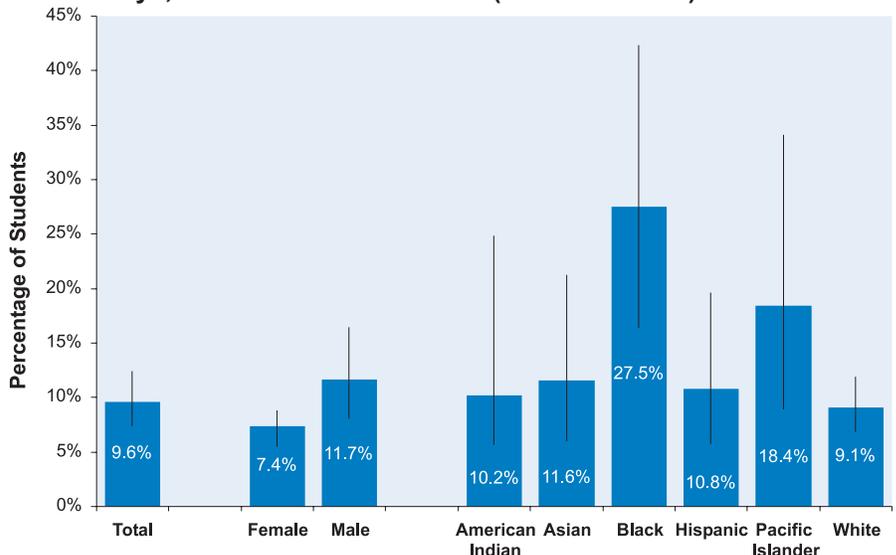
\* A major outbreak of pertussis occurred in 1998 primarily among an unvaccinated community in southern Utah.  
 † 2006 reported cases represent all cases reported as of May 22, 2006.

## Community Health Indicators Spotlight, May 2006

### Cigarette Smoking Prevalence Among Utah Youth

Despite declining smoking rates in Utah and nationwide, Utah remains the only state with a high school youth smoking prevalence of less than 10% and an adult smoking prevalence of less than 12% (Utah BRFSS). Combined data from the 2003 and 2005 Utah Youth Tobacco Survey (YTS) highlight some important disparities in tobacco use among Utah students. Male high school students reported higher rates of current smoking than female students. Students who self-identified as American Indian, Asian, Hispanic, or White, reported similar smoking rates of approximately 10%. Black or African American students reported a significantly higher rate of more than 25%. The YTS also assessed whether students had experimented with smoking. Compared to Whites, American Indian, Asian, Black, and Hispanic students were almost twice as likely to have tried cigarette smoking. In 2005, the greatest relative increase in current smoking among all student groups occurred between 8th and 9th grade. Since most adult smokers started smoking before the age of 18, these findings have important implications for tobacco prevention program planning.

**Percentage of students who smoked cigarettes on one or more of the last 30 days, Utah YTS 2003 and 2005 (combined data)**



# Monthly Health Indicators Report

(Data Through April 2006)

<b>Monthly Report of Notifiable Diseases, April 2006</b>	Current Month # Cases	Current Month # Expected Cases (5-yr average)	# Cases YTD	# Expected YTD (5-yr average)	YTD Standard Morbidity Ratio (obs/exp)
Campylobacteriosis (Campylobacter)	14	21	59	66	0.9
Enterotoxigenic Escherichia coli (E. coli)	2	3	7	11	0.6
Hepatitis A (infectious hepatitis)	1	3	5	16	0.3
Hepatitis B (serum hepatitis)	7	4	10	14	0.7
Influenza**					
Measles (Rubeola, Hard Measles)	0	0	0	0	--
Meningococcal Diseases	1	0	3	2	1.3
Norovirus	0	0*	0	6*	0.0
Pertussis (Whooping Cough)	96	13	351	46	7.7
Salmonellosis (Salmonella)	22	17	75	59	1.3
Shigellosis (Shigella)	1	4	12	15	0.8
Varicella (Chickenpox)	107	36*	385	238*	1.6
Viral Meningitis	6	5	50	22	2.3
<b>Notifiable Diseases Reported Quarterly, 1st Qtr 2006</b>	Current Quarter # Cases	Current Quarter # Expected Cases (5-yr average)	# Cases YTD	# Expected YTD (5-yr average)	YTD Standard Morbidity Ratio (obs/exp)
HIV	11	14	11	14	0.8
AIDS	10	13	10	13	0.8
Chlamydia	1,125	618	1,125	617	1.8
Gonorrhea	213	72	213	72	3.0
Tuberculosis	6	6	6	6	1.0
<b>Program Enrollment for the Month of April 2006</b>	Current Month	Previous Month	% Change <sup>s</sup> From Previous Month	1 Year Ago	% Change <sup>s</sup> From 1 Year Ago
Medicaid	176,927	178,723	-1.0%	178,774	-1.0%
PCN (Primary Care Network)	15,653	16,046	-2.4%	20,585	-24.0%
CHIP (Children's Health Ins. Plan)	35,483	34,957	+1.5%	30,577	+16.0%

<b>Medicaid Expenditures (in Millions) for the Month of April 2006</b>	Current Month	Expected/Budgeted for Month	Fiscal YTD	Budgeted Fiscal YTD	Variance - over (under) budget
Capitated Mental Health	\$ 15.5	\$ 8.4	\$ 90.3	\$ 81.2	\$ 9.0
Inpatient Hospital	\$ 18.0	\$ 18.7	\$ 142.8	\$ 144.7	(\$ 1.9)
Outpatient Hospital	\$ 7.5	\$ 6.8	\$ 57.1	\$ 53.0	\$ 4.0
Long Term Care	\$ 12.5	\$ 13.7	\$ 139.3	\$ 136.3	\$ 3.1
Pharmacy	\$ 11.5	\$ 17.7	\$ 152.3	\$ 171.6	(\$ 19.3)
Physician/Osteo Services	\$ 6.1	\$ 6.7	\$ 52.3	\$ 51.2	\$ 1.1
<b>TOTAL HCF MEDICAID</b>	<b>\$ 186.9</b>	<b>\$ 168.0</b>	<b>\$ 1,186.9</b>	<b>\$ 1,183.7</b>	<b>\$ 3.2</b>
<b>Health Care System Measures</b>	Number of Events	Percentage of Utah Population	% Change <sup>s</sup> From Previous Year	Total Charges in Millions	% Change <sup>s</sup> From Previous Year
Overall Hospitalizations (2004)	266,195	10.1%	-0.3%	\$ 3,225.0	+11.1%
Non-maternity Hospitalizations (2004)	160,302	5.9%	0.0%	\$ 2,692.5	+12.0%
Emergency Department Encounters (2004)	627,078	24.2%	-4.2%	\$ 456.6	+14.7%
Outpatient Surgery (2004)	303,123	11.7%	+6.0%	\$ 845.3	+15.6%
<b>Annual Community Health Measures</b>	Current Data Year	Population at Risk	Number Affected	Percent/Rate	% Change <sup>s</sup> From Previous Year
Overweight and Obesity (Adults 18+)	2005	1,740,474	942,900	54.2%	-3.9%
Cigarette Smoking (Adults 18+)	2005	1,740,474	200,600	11.5%	+9.7%
Influenza Immunization (Adults 65+)	2005	212,582	148,300	69.7%	-7.6%
Health Insurance Coverage (Uninsured)	2005	2,528,926	292,800	11.6%	+13.5%
Motor Vehicle Crash Injury Deaths	2004	2,469,230	299	12.1 / 100,000	+4.3%
Suicide Deaths	2004	2,469,230	378	15.3 / 100,000	+10.1%
Diabetes Prevalence	2005	2,528,926	104,200	4.1%	+8.7%
Coronary Heart Disease Deaths	2004	2,469,230	1,603	64.9 / 100,000	-8.1%
All Cancer Deaths	2004	2,469,230	2,442	98.9 / 100,000	-2.0%
Births to Adolescents (Ages 15-17)	2004	57,505	857	14.9 / 1,000	-6.9%
Early Prenatal Care	2004	50,653	39,509	78.0%	0.0%
Infant Mortality	2004	50,653	263	5.2 / 1,000	+4.0%
Childhood Immunization (4:3:1:3:3)	2004	48,619	34,700	71.3%	-9.5%

\* Due to limited historical data, the average is based upon 3 years of data for norovirus and varicella infections.

\*\* During this month, influenza activity remained muted. The average weekly proportion of patient visits to sentinel providers in Utah for influenza-like illness (ILI) were below baseline values for this month. As of April 30, 2006, 482 influenza-associated hospitalizations have been reported to UDOH.

§ % Change could be due to random variation

Note: Active surveillance has ended for West Nile Virus (WNV) until the 2006 season.