

The Severity of Tooth Decay in Arizona's Children

se·ver·i·ty – used of the degree of something undesirable e.g. pain [syn: badness] 2: something hard to endure.

Although tooth decay is the most common chronic disease in children, it is largely preventable. The Arizona school Dental Survey 1999-2003¹ found that children in grades kindergarten through third are above the *Healthy People 2010* target of 42%. If we take a closer look at those with decay, we can learn about the health of these children so that we can one day eliminate their suffering including:

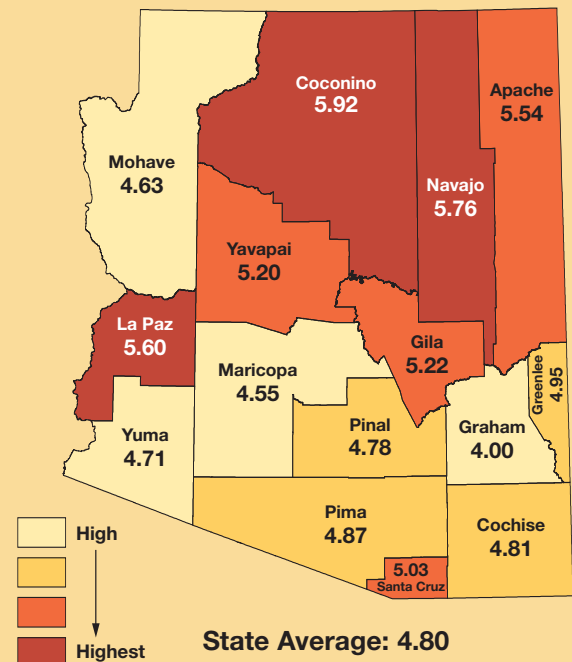
- How many of their teeth have decay?
- How many children still need treatment for tooth decay?
- How many children are in pain or have visible infection?

Arizona children on average have 5 teeth affected by tooth decay (cavities).

- This is three times higher than the national average of 1.4 teeth with decay or fillings.²
- This equates to about 1 out of every 4 teeth in a child's mouth.
- 34% of children have 1-2 teeth with decay or fillings,
23% of children have 3-4 teeth with decay or fillings,
43% of children have 5 or more teeth with decay or fillings.
- Some children are severely affected and have as many as 20 teeth with decay or fillings.

Some children have received treatment for tooth decay including fillings or crowns, root canals or extractions. Yet, more than one in three children (34%) still have untreated tooth decay (active decay).

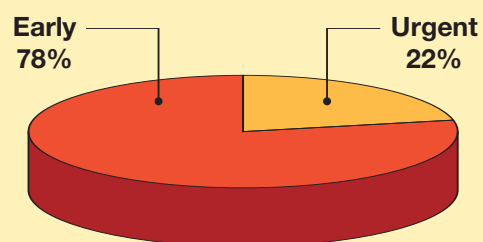
Teeth with Decay and/or Fillings Among Children Who Have Experienced Decay



Source Data: ADHS OOH Arizona School Dental Survey, 1999-2003.

Arizona children, kindergarten through third grade, have severe dental treatment needs.

- 22% of children with tooth decay have urgent treatment needs. This means they have decay with pain and/or infection needing dental treatment within 24 hours.
- 78% of children have early treatment needs and require dental care within the next several weeks.



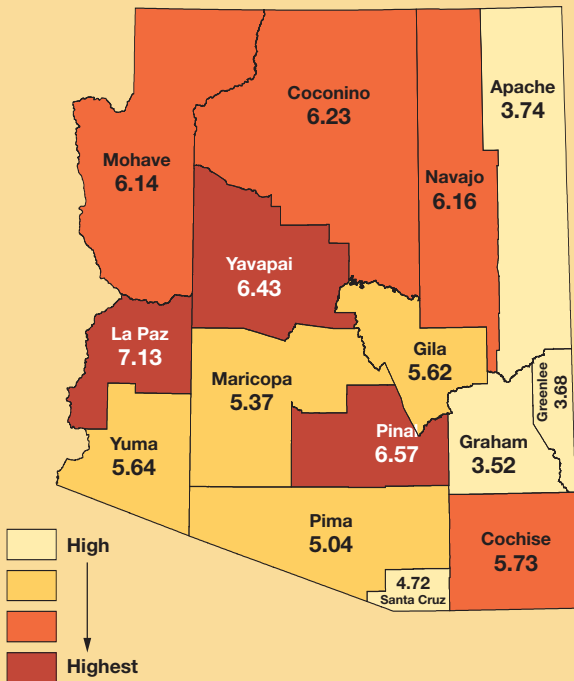
¹ Arizona Department of Health Services: Division of Public Health Services, Public Health Prevention Services, Office of Oral Health: Arizona School Dental Survey, 1999-2003.

² Beltran-Aguilar ED, Barker LK, Canto MT, Dye BA, Gooch BF, Griffin SO, Hyman J, Jaramillo F, Kingman A, Nowjack-Raymer R, Selwitz RH, Wu T; Centers for Disease Control and Prevention (CDC). Surveillance for dental caries, dental sealants, tooth retention, edentulism, and enamel fluorosis—United States, 1988-1994 and 1999-2002. *MMWR Surveill Summ.* 2005;54:1-43. Abstract PubMed.

On average, each child currently needs 6 fillings.

- Some children only need one filling, while other children need fillings on nearly all (20) their teeth.

Cavities Needing Fillings
Children Who Have Experienced Decay



Source Data: ADHS OOH Arizona School Dental Survey, 1999-2003.

Too many children already have tooth decay – a chronic disease that impacts overall health. Because of the progressive nature of the disease, poor oral health in children can impact their health into adulthood. Research continues to link oral health and the following health problems:

- Diabetes
- Cardiovascular diseases (stroke)
- Premature low birth weight babies
- Failure to thrive

Like these other conditions, prevention of oral disease



and tooth decay needs a comprehensive, integrated approach that addresses many factors including:

- **Environment** (access to community water fluoridation, number of dental providers, transportation)
- **Personal or social norms/behaviors** (daily oral hygiene care, diet, oral health IQ, transmission of disease, value of good oral health)
- **Political** (funding, support for community water fluoridation, competing interest groups, scope of dental practice)
- **Economic** (availability/access to dental insurance, costs associated with delivering dental treatment)

It is clear that the improvement in oral health for children is not a task that can be accomplished by any single agency, be it the Federal government, State health agencies, or private organizations. Rather, actions must be developed through collaboration and partnerships involving both public and private groups focused on one common goal – preventing tooth decay in children to ensure a lifetime of optimal oral health.



This is the second in a series of briefs reporting on the oral health of Arizona’s school children in kindergarten through third grade. For additional information or to learn how to improve the oral health of children go to:

Office of Oral Health
www.azdhs.gov/cfhs/ooH
602.542.1866

Funding provided by the Robert Wood Johnson Foundation’s State Action for Oral Health Access grant.