

Brushing up on the Basics: Reducing Cavities in Buffalo, WY

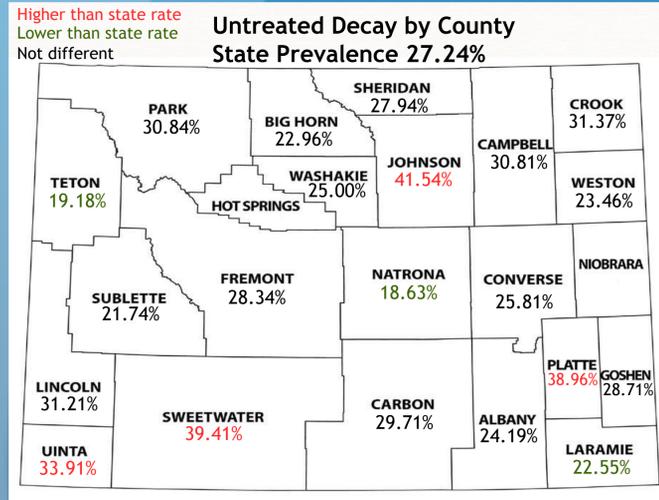
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Purpose:

This transitional research project was initiated as an intervention aimed at reducing the number of cavities in children ages 3 to 8 years old in a region with poor dental hygiene outcomes.

Background:

- Population of Johnson County Wyoming is 8,500 with 4,600 in Buffalo.
 - About 5.7% of the County is under 5 years old and 22.2% under 18 years old.
- The rate of untreated tooth decay for third graders in Wyoming is 27.24 % but in Johnson County 41.54 % of children experience untreated decay.



Methods:

- A literature review identified that supervised brushing of teeth in children reduces rates of cavities in several trials.
- The proposed implementation process for post-lunch supervised brushing of teeth was discussed with leaders at Noah's Ark Christian Daycare and Cotant Family Dental.
- Two parents of children in the target age range along with the daycare staff expressed strong support and enthusiasm for the intervention.

Results:

- Noah's Ark Christian Daycare received instructional material for staff to implement the brushing intervention:
 - The staff will demonstrate to children how to properly brush their teeth.
 - The daycare will designate an area for children to safely and properly store their toothbrush at the daycare.
 - Each day after lunch an employee will distribute toothpaste to the children and supervise the brushing of teeth.
 - A dental hygienist from Cotant Family Dental has volunteered to give an educational session for parents and employees of the daycare on oral hygiene.
 - An educational handout was provided for parents explaining proper dental hygiene for children and outlining the daycare program.

Discussion:

- Community members in Johnson County express strong opposition to fluoride addition in the municipal water. The structured brushing exercise offers an opportunity to improve dental health while keeping all community members on board.
- The daycare administrator expressed some concern about methods to keep the toothbrushes clean during storage. A design was implemented to address this problem however; the process to isolate and clean the brushes must be implemented carefully throughout the intervention process.
- If administration of the intervention at Noah's Ark Christian Daycare goes smoothly the intervention will be promoted at other schools and daycares by working post-lunch brushing into their daily schedule.

