



Bureau of Oral Health

Newsletter | Issue 23 | First Quarter of 2024

In this issue:

- **Note from State Dental Director**
Page 1
- **Early Education Projects**
Pages 1-2
- **Beyond Brick & Mortar Dentistry**
Page 2
- **Community Water Fluoridation Series**
Pages 3-4
- **Kansas School Screening Program (KSSP)**
Page 4
- **Upcoming Events**
Page 5

A Note from the State Dental Director

Dear Colleagues,

As we complete the first quarter of the new year, we can look forward to a few exciting projects lined up for this year that I would like to share with you throughout this newsletter. The importance of improving oral health access and outcomes for all Kansans remains the priority of our bureau and the focus of our current and upcoming projects and programs. We couldn't do this without the support and assistance of our Legislators, Community Partners, Stakeholders, and Healthcare Professionals across the state. The idea of "good" oral health goes way beyond not having a cavity at your next visit to the dentist; it encompasses focusing on health equity issues and addressing health disparities to ensure that even our most vulnerable populations have access to care. Within the Bureau of Oral Health, every day is an opportunity to improve oral health education, oral health hygiene, oral health access, and our state's oral health outcomes! Thank you for being part of this mission.

Make a difference,

Dr. Dayna Brinckman, DDS, CHCEF



Early Education Projects

National level programs such as Brush/Book/Bed created by the American Academy of Pediatrics and Cavity Free at Three managed by the Colorado Dept of Public Health & Environment, are examples of early oral health education programs whose impact can touch a child for a lifetime. For the past two years, BOH has contracted with Oral Health Kansas (OHK) to establish and grow these programs throughout all regions of the state. These two programs join our existing WIC Early Education program efforts in educating



Early Education Focused Projects

on the importance of good oral health hygiene from birth to 5 y/o. According to CDC's Division of Oral Health, early education oral health programs are targeted at addressing the statistic that "more than half of children aged 6 to 8 have had a cavity in at least one of their baby (primary) teeth".

New for 2024, are the opportunities to expand all three of these programs in more Community Health Centers, Dental Safety Net Clinics, Pediatric Clinics, WIC offices and School-Based Early Education programs in your communities to ensure Kansas' youngest citizens receive the education necessary to begin their lifelong journey of good oral health. Contact BOH if you are interested in finding out more about these programs at KBOH@ks.gov.

Beyond Brick & Mortar Dentistry

Dentistry continues to advance and incorporate a variety of available technologies to reach patients that otherwise would not be served. Many dental practices here in Kansas have adopted teledentistry, 3D imaging and mobile outreach services over the past several years as they focus on patient-centered service delivery care models.

New for 2024 is the BOH Dental Lab within Kansas Department of Health and Environment. This designated training space allows for dental professionals to receive hands-on experience and training with mobile outreach and teledentistry equipment they are considering for their organization. As funding allows, we can continue to be a resource to these organizations, after their visit, by supporting their service expansion efforts with equipment, supplies and on-going assistance to increase access to care in their communities. Please [contact us](#) for more information about this opportunity.



Bureau of Oral Health Highlight

Community Water Fluoridation Educational Series 1 of 4

An Abbreviated History of Fluoride and Community Water Fluoridation

John Rudolph, Water Fluoridation Specialist

In the Summer 2023 newsletter, the fluorine ion was identified as the 13th most abundant element in the earth's crust. This prevalence of the ion eventually led to its discovery in the United States by a dentist named Frederick S. McKay in the early twentieth century. Dr. McKay started a dental practice in Colorado Springs, CO. During his time practicing in this area, he noticed that many of his patients' teeth exhibited a condition he called "Colorado Brown Stain". Up to this point, there was no scientific literature to explain this condition. In 1908 he began a research study and found that this condition, now known as fluorosis (mottled teeth), was prevalent in the surrounding county. As Dr. McKay and others continued to study this condition, another discovery was made. Patients' teeth that exhibited "Colorado Brown Stain" were essentially free of dental caries (ie tooth decay/ cavities). Eventually in 1931, high levels of fluoride in the drinking water was identified as the element that both caused the fluorosis but also inhibited dental caries.

Study of the fluoride ion naturally occurring in water continued and in 1945 the first water treatment plant in Grand Rapids, MI started adjusting their natural fluoride levels to optimal levels by adding fluoride to their drinking water. Dr. H. Trendley Dean, head of the dental hygiene unit at the National Institute of Health (NIH), had been studying the fluoride ion and had developed a method of measuring the fluoride ion in water with an accuracy of 0.1 ppm. Prior to the initiation of the community water fluoridation program in Grand Rapids, MI Dr. Dean had conducted numerous studies across the United States using his fluoride meter to determine the fluoride concentrations in various drinking water supplies. During these studies, he discovered that fluoride concentrations up to 1.0 ppm did not cause dental fluorosis in most people and only mild dental fluorosis in a small percentage of the population.

Using this data and the technology developed by Dr. Dean, natural fluoride concentrations were adjusted in Grand Rapids, MI and the first study on community water fluoridation was initiated. During the 10-year study that ensued, researchers monitored the rate of tooth decay among Grand Rapids' almost 30,000 schoolchildren. During the study, it was discovered that the caries rate among Grand Rapids children born after fluoride was added to the water supply dropped more than 60 percent. Since this first study was conducted, there have been thousands of scientifically approved research studies conducted by the U.S. Public Health Service, State health departments, and nongovernmental research organizations that have supported the effectiveness and safety of community water fluoridation at optimal concentrations.

Community Water Fluoridation Educational Series

The United States Environmental Protection Agency (EPA) has set a secondary maximum contaminant level of 2.0 ppm and a maximum contaminant level of 4.0 ppm for fluoride. The Centers for Disease Control and Prevention (CDC) currently has the optimal fluoride concentration identified as 0.7 ppm.

If you are interested in learning more about the history of fluoride and would like to obtain a more detailed knowledge of how it is utilized by community water systems, the CDC offers a free online course called Fluoridation Learning Online (FLO). FLO is free to anyone interested in taking the course and provides beneficial information to water treatment plant operators, community decision makers, or anyone who is interested in learning more about fluoride. The following link will take you to the FLO homepage where you can find many resources regarding fluoride and register for the course: [CDC-Sponsored Water Fluoridation Training | Engineering | Community Water Fluoridation | Division of Oral Health | CDC](#) .

References:

Reeves, T. G. (1986). Water fluoridation: A manual for engineers and technicians. U.S. Dept. of Health and Human Services, Public Health Service, Centers for Disease Control, Dental Disease Prevention Activity, Center for Prevention Services.

[U.S. Department of Health and Human Services. \(n.d.\). The story of fluoridation. National Institute of Dental and Craniofacial Research.](#)

Kansas School Screening Program (KSSP) Update

As we approach the home stretch of the current school year, Dental Professionals continue to provide free dental screenings to school-age children across the state. Many of these Dentists and Registered Dental Hygienists are volunteers or are part of mobile dental outreach teams that provide an array of services including screenings, prophylactic and restorative services. If you're interested in becoming a Screener or would like more information about KSSP, please [email us](#).

KSOH Total and Percent Screened Report

For School Year: 2023 - 2024

Kansas 2023			
Condition	Number Of Students	Percent Of Students	Current Enrollment Information
Untreated Decay Yes	17,768	11.86	
Untreated Decay No	131,933	88.14	Total Enrolled
Treated Decay Yes	53,220	35.53	512,965
Treated Decay No	96,481	64.47	
Sealants Present Yes *	37,045	38.14	Free / Reduced Lunch
Sealants Present No *	60,078	38.14	247,985
Urgent Care Needed	2,687	1.79	
Total Number Of Students Screened	14,9701		Free / Reduced Lunch %
* data reported on grades 3-12 only	97,227		48.34

Save the Date

April 15-17, 2024

National Oral Health Conference, St. Louis, MO

The National Oral Health Conference® (NOHC) is “the premier meeting” for those interested in continuing education and networking opportunities within the discipline of Dental Public Health. 2024 will mark the 25th joint meeting of the Association of State and Territorial Dental Directors (ASTDD) and the American Association of Public Health Dentistry (AAPHD).



Kansas Department of Health and Environment | Bureau of Oral Health

Curtis State Office Building
1000 SW Jackson, Suite 300
Topeka, KS 66612

Contact Us

(785) 368-8264
KBOH@ks.gov

Staff

[Dayna Brinckman DDS, CHCEF](#)
Bureau Director

[Amalia Almeida, APRN, MSN](#)
Children's Oral Health Program
Manager

[Debra Trybom, RDH, ECPIII](#)
Outreach Dental Hygienist

The Bureau of Oral Health wishes to thank all the Dentists and Dental Hygienists, Parent Volunteers, School Nurses, Screeners and others that have contributed their valuable time and efforts towards providing and improving oral health among children in Kansas.

This publication was supported by the Grant Number, 18-1810, funded by the Centers for Disease Control and Prevention. Its contents are solely the responsibility of the authors and do not necessarily represent the official views of the Centers for Disease Control and Prevention or the Department of Health and Human Services.

Helpful links:

[Kansas Department of Health and Environment](#)

[American Dental Association](#)

[Events & Community Outreach Programs](#)

[The Kansas Dental Board](#)

[CDC SEALS](#)

[Kansas Oral Health site](#)