The Role of Local Public Health in Community Water Fluoridation

Ashley Herrman, MPH, CHES
Community Outreach and Project Development Director
Missouri Coalition for Oral Health

Gwen Sullentrup
Community Water Fluoridation and Dental Sealant Coordinator
Missouri Department of Health & Senior Services - Office of Dental Health

Sharon Whisenand
Administrator
Randolph County Health Department

Overview

- The Context
- The Missouri Office of Dental Health
- The Missouri Coalition for Oral Health
- Local Public Health and Oral Health
- Community Water Fluoridation
- Legislation
- Anti-Fluoridation Activity
- Local Public Health and Community Water Fluoridation
- Support
- Examples
- Questions
Oral Health is Essential to Health

- Oral diseases are a devastating problem among a significant percentage of Missouri's residents, affecting their overall health and ability to work and learn.
- Access to oral health care varies greatly across the state.
- The need for services has been documented in the statewide oral health plan.
- Poor oral health is linked to heart disease, diabetes, stroke, depression, low birth weight and premature birth.
- Oral diseases affect individuals, families and communities.
- Poor oral health can negatively affect employment and the economic strength of the state.
- Untreated dental diseases can impact loss of productivity in the workplace due to absenteeism, under-employment and unemployment.
- Children with untreated tooth decay not only suffer pain and infection, they have trouble eating, talking, socializing, sleeping, and learning, all of which can impair school performance and lower academic achievement.
- Lack of access to oral health care leads to increased use of Emergency Rooms and increased use of inpatient hospitalizations to address complications from untreated dental conditions.

The Oral Health of Missouri is Poor

- The Pew Charitable Trusts gives Missouri a "C" for children's oral health and a "D" for use of dental sealants.
- Sixty-four percent of Missouri Medicaid-enrolled children received no dental care.
- Forty-four percent of skilled nursing facility residents were assessed as having untreated decay.
- Among Missouri seniors 65 years and older, 18.8% experienced complete tooth loss compared to the national rate of 15.1%.
- About 45% of Missouri adults 18 to 64 years old have lost some or all of their permanent teeth due to decay or gum disease.
- There are 1,730,257 Missourians (roughly 28% of the population) living within a dental health professional shortage area.
The Missouri Office of Dental Health

- Housed under the Division of Community and Public Health
- 6 employees plus 5 oral health consultants
- Currently funded by CDC cooperative agreement, MCH and HRSA grants and Delta Dental of Missouri
- Primary areas of Activity
  - Children’s oral health, dental sealants, fluoride varnish
  - Community Water Fluoridation
  - Adult dental needs.
  - Access to care
  - Workforce development

Activities of the Office of Dental Health

- Preventive Services Program
- CDC Cooperative Agreement which include fluoridation education activities and school-based sealant programs
- HRSA Workforce Grant
- Delta Dental Student Loan Repayment Grant
- PHHS fluoridation education activities
- Delta Dental water fluoridation equipment upgrade and replacement program
The Missouri Coalition for Oral Health

- 501(c)(3) organization best described as a diverse, statewide network of oral health advocates throughout Missouri.
- Mission - Improve oral health with all Missourians through sound public policy.
- Vision - Oral health for all Missourians.
- The Coalition is governed by a 12-member board.
- Funding
  - www.oralhealthmissouri.org

MCOH Policy Goals

- Reduction of tobacco use and vaping to improve Missouri oral health
- Incorporation of oral health care in school-based health care
- Expanded coverage of and access to silver diamine fluoride for all Missourians
- Improvement of MO HealthNet by implementing best practices and system improvements to increase provider participation and MO HealthNet participant usage
- Inclusion of a comprehensive dental benefit in MO HealthNet
- Protection and expansion of public water system fluoridation
- Expansion of access to dental sealants for children without routine dental care
- Inclusion of a comprehensive dental benefit in Medicare
- Implementation of a statewide public awareness campaign about the importance of oral health to overall health
- Strengthening provider networks and expansion of service delivery of dental care for high-risk, vulnerable, MO HealthNet and uninsured populations, including people with disabilities and special health care needs
- Incorporation of oral health in the patient-centered medical home
MCOH Activities

- Missouri Oral Health Policy Conference
- Oral Health Caucus
- State Dental Director Position
- Missouri Medicaid Adult Dental Benefits
- Access to Care for Individuals with Intellectual and Developmental Disabilities
- Increased Reimbursement for Medicaid Dental Rates

Local Public Health and Oral Health

- Oral health is emphasized by many local public health agencies
- Service provision – fluoride varnish, clinical services
- Community education
- Assistance with access
  - Special Health Care Needs
- Collaboration with local dental care providers
- Membership in the Coalition
- Participation in the Missouri Oral Health Policy Conference
- Work on local community water fluoridation issues, sometimes in a leadership role
Oral Health and Local Public Health

- Projects with ODH
  - WIC agencies to provide fluoride varnish to families
  - Direct dental care by teledentistry for school based programs and nursing homes
  - Dental sealant program contract to provide sealants in schools
  - Direct dental care to veterans through the Smiles for Veterans program with ATSU
- Direct support activities
  - Fluoridation Rollback and Initiation
  - Education on CWF and dental sealants
  - Presentations to Public by ODH staff as requested

Community Water System Fluoridation

- Community or public water system fluoridation has been practiced safely in the United States for over 75 years
- Fluoride is a mineral that occurs naturally
  - Present in many water supplies in Missouri
- The U.S. Public Health Service has set an optimal level to reduce cavities at 0.7 ppm
- The science behind fluoridation is clear and well-researched
- Recent research has shown that discontinuing water fluoridation results in increased cavities and reaffirms effectiveness from 50 years ago.
- Community water system fluoridation is an equitable public health intervention, supporting the health of all community members
  - It is especially important for community members without a routine source of dental care
- Many Missourians do not get water from public systems, private wells are unregulated
Community Water Fluoridation – quick facts

- "One of the 10 best public health interventions of the last century" - CDC
- Safe – no research has shown that CWF is hazardous when used at the recommended level of 0.7 ppm
- Effective – research has shown that CWF reduces tooth decay by 25% even with fluoridated tooth paste and fluoridated mouthwash
- Economical – studies have shown that for every $1 invested in water fluoridation saves $32 in dental treatment costs.
- In 2020, 72.7% of the US population on community water systems, or 209,145,650 people, had access to fluoridated water.

“Community water fluoridation continues to be the most cost-effective, equitable and safe means to provide protection from tooth decay in a community. A person’s income level or ability to receive routine dental care is not a barrier to receiving fluoridation’s health benefits. Water fluoridation is a powerful strategy in our efforts to eliminate differences in health among people and is consistent with my emphasis on the importance of prevention.”

Vice Admiral Richard Carmona, M.D., M.P.H., F.A.C.S., 2002-2006
Fluoridation Trends

Missouri Fluoridation Trends

US Fluoridation Trends

Persons Receiving Fluoridated Water
Persons Served by CWS

Persons Receiving Fluoridated Water
Persons Served by CWS
Fluoridation Trends in Missouri

- Since 2010, over 70 small Missouri communities have discontinued fluoridation.
- Current reduction of population that drinks adequately fluoridated water from 79.8% in 2010 to 72.2% in 2020.
  - Two major losses of CSF in Battlefield, MO and Houston, MO accounts for 32,000 people no longer receiving CWF.
  - Clarence Cannon, Warsaw, and Branson are the most recent fluoridation rollbacks.
- Successful defense of 2 Rollback efforts in Festus, MO and Park Hills, MO, LPHAs were key in both situations.

House Bill 1717

- Passed in 2016 session; Effective August 2016
- Legislation considered as part of an overall effort to elevate oral health as a policy issue of importance
- Require notification of water customers 90 days before considering discontinuing water fluoridation
- Also notify MO Dept. of Natural Resources & MO Dept. of Health & Senior Services – the state public health authority
- Provide an opportunity for fluoridation to be defended at the local level
Statute

640.136 1. Any public water system, as defined in section 640.102, or public water supply district, as defined in chapter 247, which intends to make modifications to fluoridation of its water supply shall notify the department of natural resources, the department of health and senior services, and its customers of its intentions at least ninety days prior to any vote on the matter. The public water system or public water supply district shall notify its customers via radio, television, newspaper, regular mail, electronic means, or any combination of notification methods to most effectively notify customers at least ninety days prior to any meeting at which the vote will occur. Any public water system or public water supply district that violates the notification requirements of this section shall return the fluoridation of its water supply to its previous level until proper notification is provided under the provisions of this section.

Park Hills, MO Rollback

- Notified in May 2020 by DNR of intent to Rollback
- Contacted St. Francois County Health Department
- Organized Task Force
- Worked with Amber and local leaders and directly with the City Administrator
- Multiple levels of contact, dentist, hospital, physicians, schools, school nurses other local leaders for support
- Able to stop the Rollback
- ODH provided funding to upgrade and replace all outdated fluoridation equipment
Salisbury, MO Rollback

- Notified in January 2021 by DNR of intent to Rollback
- Contacted Chariton County Health Department
- Organized Task Force
- Worked with Environmental Specialist, local leaders (Dr. Gary Harris) and the FQHC
- Multiple levels of contact, dentist, hospital, physicians, schools, school nurses other local leaders for support
- Able to stop the Rollback
- ODH offered funding to repair or provide new equipment to the water board – funds were declined

Harrisonville, MO Attempted Rollback

- Notified in March 2022 that city council was considering removal of fluoridation
- Contacted Cass County Health Department and Cass Community Health Foundation
- Organized Task Force
- Worked with Katie Schroeder, RDH with Cass County Dental and Sarah Czech, administrator for Cass Co Health Department
- Multiple levels of contact, dentist, hospital, physicians, schools, school nurses other local leaders for support
- Able to stop the Rollback before it started
- ODH provided funding to upgrade and replace all outdated fluoridation equipment
Lake Winnebago, MO Rollback

- Notified in August 2023 by DNR of intent to Rollback
- Contacted Cass County Health Department and Cass Community Health Foundation
- Organized Task Force
- Worked with Katie Schroeder, RDH with Cass County Dental and Sarah Czech, administrator for Cass Co Health Department, as well as dentists who lived in Lake Winnebago
- Multiple levels of contact, dentist, hospital, physicians, schools, school nurses other local leaders for support
- Able to stop the Rollback
- ODH provided funding to upgrade and replace all outdated fluoridation equipment – equipment set to be installed and operational by June 2024

Clarence Cannon Wholesale Water Commission Initiation

- Notified in January 2021 by DNR of intent to initiate fluoridation
- Contacted water system manager, water board, county health departments in 22 counties and 22 local decision-making bodies
- Organized Task Force
- Worked with health departments, local dentists, FQHCs, water board, local decision-making bodies
- Multiple levels of contact, dentist, hospital, physicians, schools, school nurses other local leaders for support
- Unable to start initiation – died on the table in a tie vote 11 for and 11 against
- ODH offered funding to purchase all equipment, to cover all engineering costs and provide training to water personnel
- First attempt at an initiation in over 30 years
Camden Co PWSD 4 – Horseshoe Bend Initiation

- Notified in September 2022 by DNR of intent to initiate fluoridation
- Contacted water operator and water board and Camden County Health Department
- Organized Task Force
- Worked with water board and health department
- Multiple levels of contact, dentist, hospital, physicians, schools, school nurses other local leaders for support
- Able to start the initiation
- ODH provided funding to purchase new fluoridation equipment – fluoridation began in Horseshoe Bend in August 2023

2024 Session: House Bill 1621
Fluoridation in Water Systems

- Filed by Representative Doyle Justus (District 41, Republican)
- First and Second Read
- Will seek new champion to re-file in 2025
- Any public water system, as defined in section 640.102, or public water supply district, as described in chapter 247, that intends to start or stop fluoridation of its water supply on a continuing basis shall seek and receive information about the impact of public water fluoridation from the local health department.
- Any public water system or public water supply district that receives information under subsection 1 of this section shall notify the department of natural resources and the department of health and senior services in order to certify that the public water system or public water supply district has sought and received information about the impact of public water fluoridation from the local health department prior to submitting notification of the public water system’s or public water supply district’s intention to start or stop public water fluoridation on a continuing basis.
Anti-Fluoridation Activity

- Missouri has been targeted by anti-fluoridationists
- Smaller communities are the focal point of activity, especially in areas where distrust of people from outside of the community tends to run high
- Conspiracy theorists, false science, misquoting, misrepresentation, exaggeration, etc.
- Contradictory information is often used
- Ultimate effort is to engender doubt – particularly effective in the case of a public vote
- Civil discussion or debate is not effective – anti-fluoridationists want you to engage with them
- Local community leaders may allow for discussion based on the assumption that the opinion of conspiracy theorists is as valid as science
- Anti-fluoridationists often approach & convince decision-makers well before the issue is raised at City Council, County Commission or water board, etc.

Fluoridation Challenges

- No funding source available for campaigns to block the antifluoridation efforts
- Usually Antifluoridation people have done their homework and know the local system well and have a plan of action
- There is not an organized response
- Dentists may not be the best people to “drive the bus”
- Pre-challenge education is the best solution,
Local Public Health Working with the Issue of Community Water System Fluoridation

- Every community is unique
- Every fluoridation conversation is unique
- Some local decision-making bodies will ask the LPHA to be involved, some will prohibit involvement
- Local conditions must be considered as the LPHA becomes involved
- LPHA leadership must determine the best course and interface
- Because local communities do not typically want people from outside involved in local decisions, the LPHA has the potential to uniquely address fluoridation as the public health issue that it is by providing factual information

Support for Local Public Health

- The Missouri Office of Dental Health provides consultation, assistance and factual information on fluoridation
- The Missouri Coalition for Oral Health is prepared to provide consultation and assistance
- The Coalition and the Missouri Dental Association often play a role of connecting locals on this issue
- Fellow LPHAs
Community Water Fluoridation Toolkit

- Developed by the Office of Dental Health
- Checklist for CWF Program Cessation and Initiation
- Missouri CWF Fact Sheet
- How to Organize for a CWF Vote
- Sample letters of support for CWF
- Quick responses to common CWF questions
- To obtain materials, contact Gwen at the Office of Dental Health

Tour Your Local Water Department

- Have conversations with local water professionals and see exactly what their job entails.
- They are providing a unique public health initiative already by providing clean water to the community - adding fluoride is another level they do not all want to achieve - why?
- Find out their why and provide them with factual, science-based resources to help change their minds.
- Most of the push back in small communities comes from water professionals!
- Make them your friend
Resources

- American Academy of Pediatrics – I Like My Teeth
- American Dental Association – Optimal Fluoride Level in Drinking Water
- ADA Mouth Healthy Fluoridation
- American Fluoridation Society
- Centers for Disease Control and Prevention
- Community Water Fluoridation and the Integrity of Equitable Public Health Infrastructure
- Fluoride Exposed
- Fluoride in Our Water: Facts You Need to Make a Healthy Choice
- Fluoride Missouri
- Fluoride Science
- How to Read a Study About Fluoride or Fluoridation
- Missouri Coalition for Oral Health – Fluoridation Resources
- The Story of Fluoridation
- What Do the Leading Health and Medical Authorities Say About Community Water Fluoridation?

Experience From The Field: Randolph County Health Department
Collaborative Strategies to Support the State Office of Dental Health

- Write a Letter of Support
- Draft a Board Resolution
- Attend a Board Meeting of your Local Water District or City Council
- Your input is important to your locals.
Contact Info:
Sharon Whisenand
Administrator
Randolph County Health Department
(660) 263-6643
whises@randolphcountyhealth.org

Questions
Ashley Herrman, MPH, CHES
aherrman@oralhealthmissouri.org
https://www.oralhealthmissouri.org

Gwen Sullentrup
Gwen.Sullentrup@health.mo.gov
https://health.mo.gov/living/families/oralhealth/index.php
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