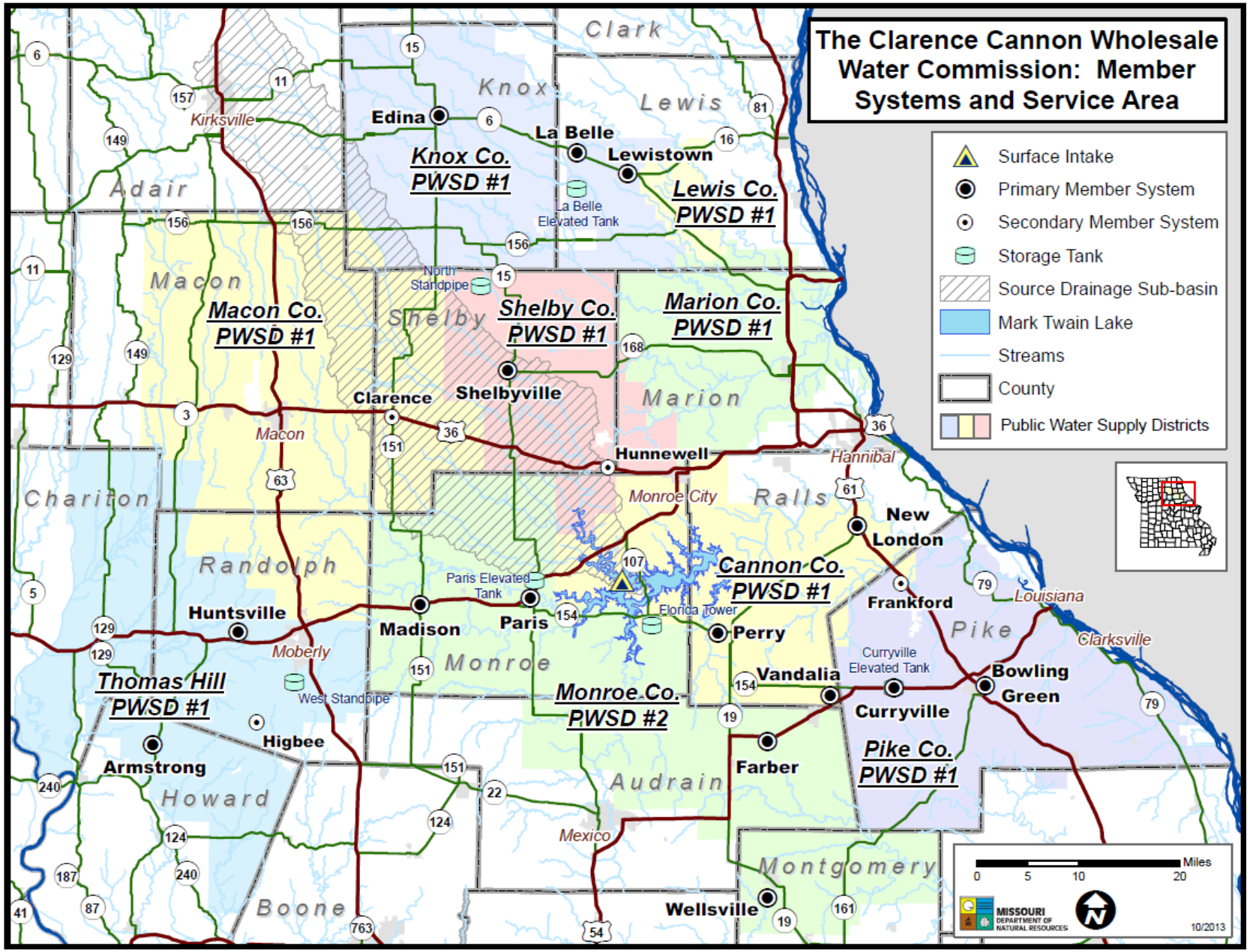
CLARENCE CANNON WHOLESALE WATER SYSTEM SERVICE AREA

CLARENCE CANNON WHOLESALE WATER SYSTEM SERVICE AREA

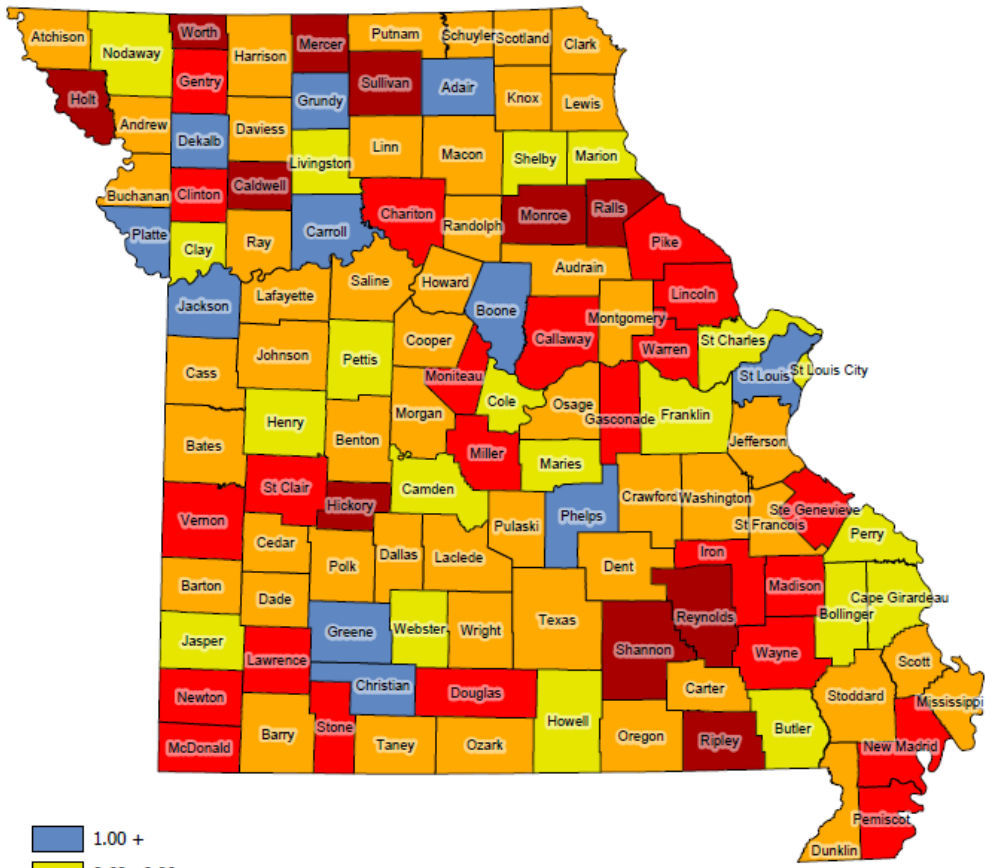


EDUCATIONAL MATERIALS USED DURING CWF INITIATIONS AND ROLLBACKS

MISSOURI DEPARTMENT OF HEALTH & SENIOR SERVICES
Office of Dental Health

HRSA Dentist Shortage Areas

All counties NOT in blue

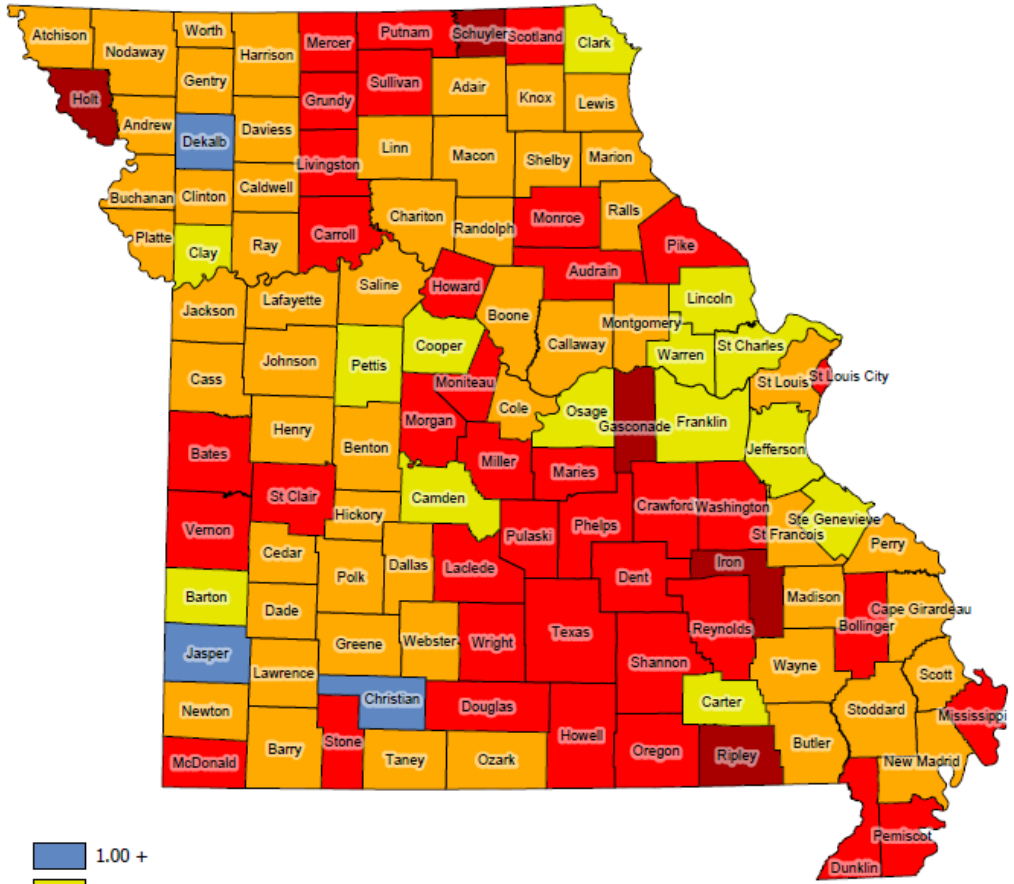


EDUCATIONAL MATERIALS USED DURING CWF INITIATIONS AND ROLLBACKS

MISSOURI DEPARTMENT OF HEALTH & SENIOR SERVICES
Office of Dental Health

Dental Hygienist Shortage Area

All counties NOT in blue

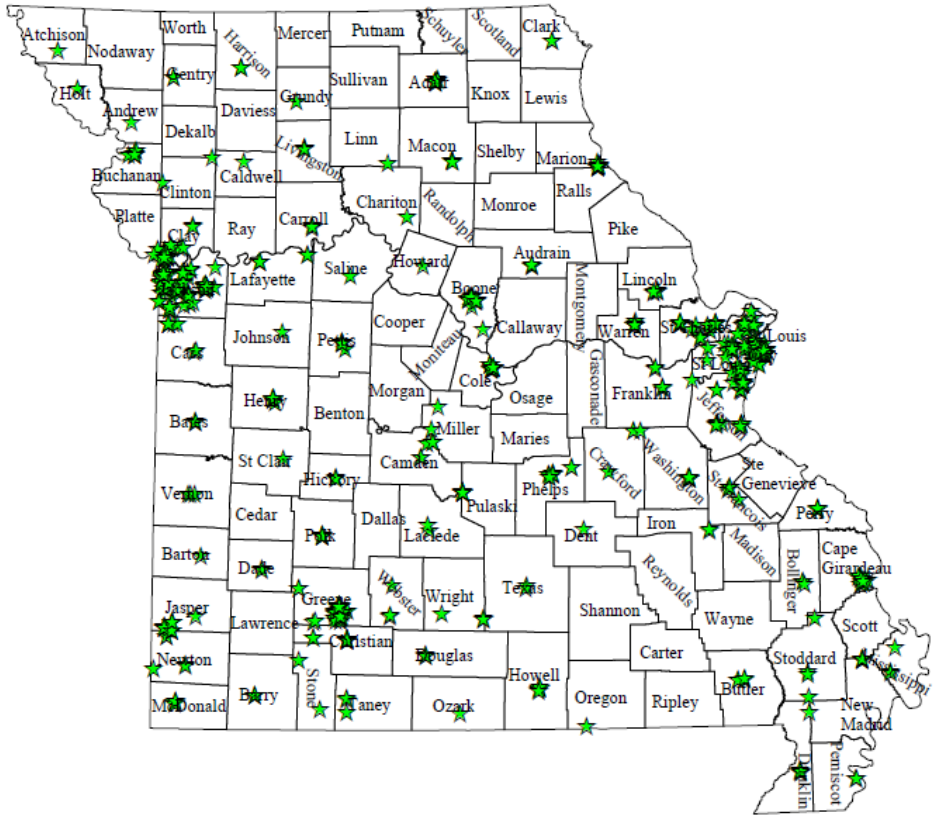


Date: 2/21/2023

EDUCATIONAL MATERIALS USED DURING CWF INITIATIONS AND ROLLBACKS

MISSOURI DEPARTMENT OF HEALTH & SENIOR SERVICES
Office of Dental Health

Dentists Accepting Medicaid



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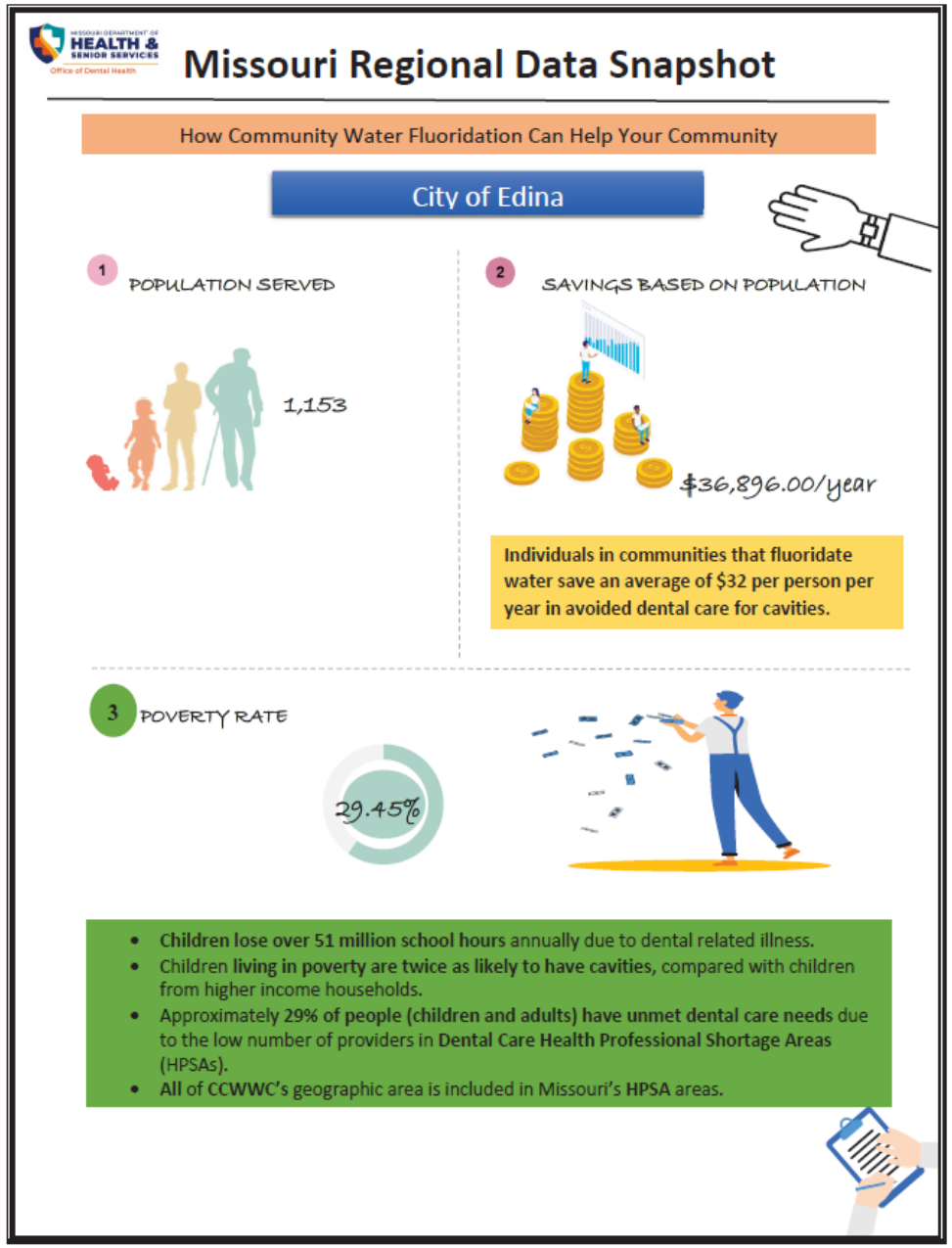
EDUCATIONAL MATERIALS USED DURING CWF INITIATIONS AND ROLLBACKS



Missouri Regional Data Snapshot

How Community Water Fluoridation Can Help Your Community

City of Edina

1 POPULATION SERVED

1,153

2 SAVINGS BASED ON POPULATION

$36,896.00/year

Individuals in communities that fluoridate water save an average of $32 per person per year in avoided dental care for cavities.

3 POVERTY RATE

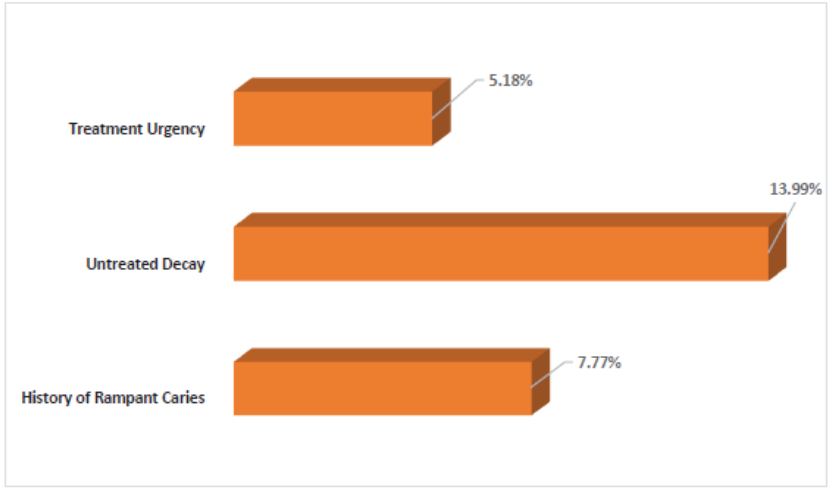
29.45%

- **Children lose over 51 million school hours** annually due to dental related illness.
- Children **living in poverty are twice as likely to have cavities**, compared with children from higher income households.
- Approximately **29% of people (children and adults) have unmet dental care needs** due to the low number of providers in **Dental Care Health Professional Shortage Areas** (HPSAs).
- **All** of **CCWWC's** geographic area is included in Missouri's **HPSA** areas.

EDUCATIONAL MATERIALS USED DURING CWF INITIATIONS AND ROLLBACKS

Missouri Regional Data Snapshot

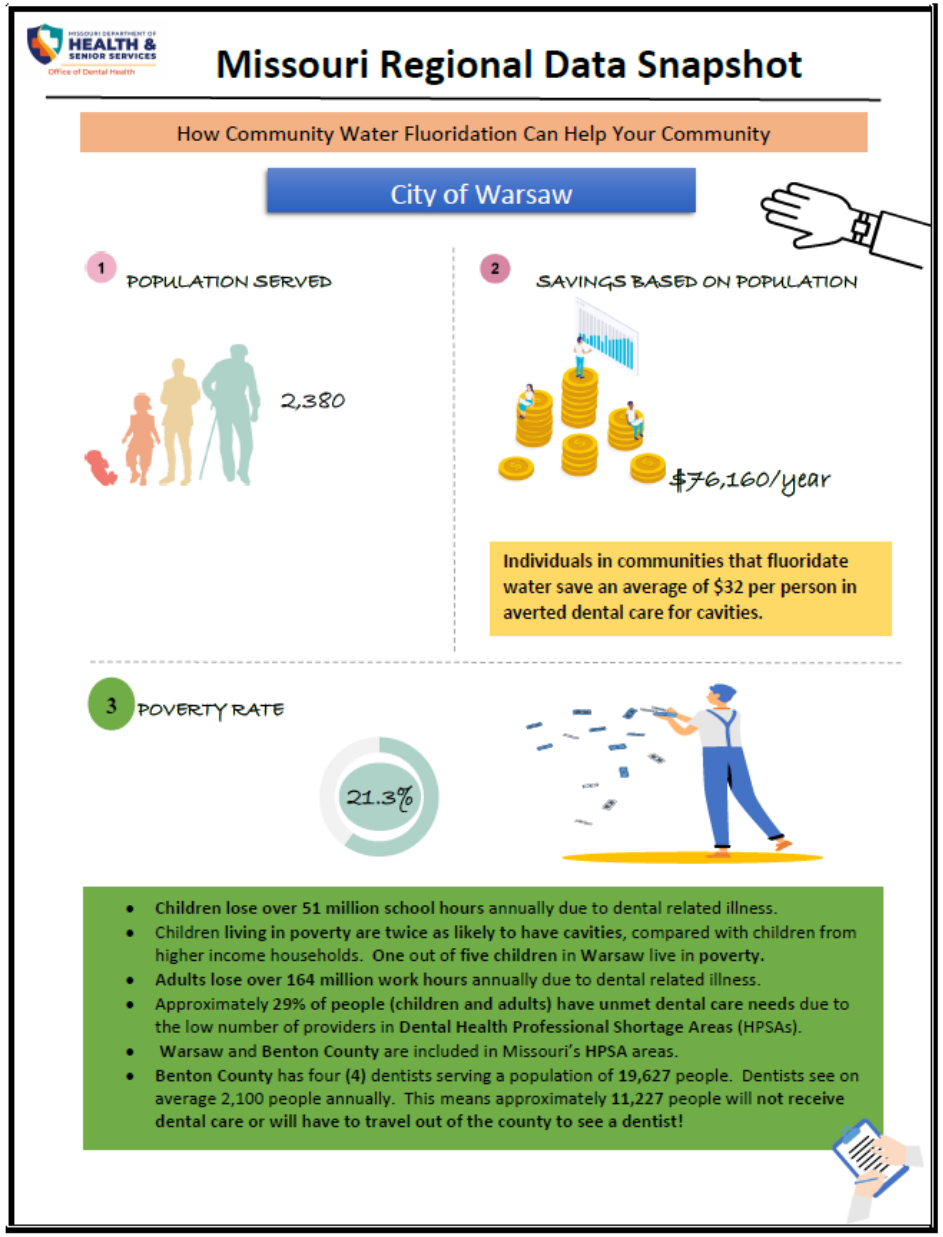
Knox County – Comparison of Treatment Urgency (Urgent Care), Rampant Caries, and Untreated Decay for Knox Elementary School and Edina Head Start school.



Key Terms:

- Urgent Care: A child who needs care within the next 24-48 hours due to pain or an infection.
- Untreated Decay: Defined as having dental cavities/tooth decay that have not received appropriate treatment.
- History of Rampant Caries: Suddenly appearing, widespread, rapid burrowing types of decay that result in early nerve involvement in 7 or more teeth.

EDUCATIONAL MATERIALS USED DURING CWF INITIATIONS AND ROLLBACKS



Missouri Regional Data Snapshot

How Community Water Fluoridation Can Help Your Community

City of Warsaw

1 POPULATION SERVED

2,380

2 SAVINGS BASED ON POPULATION

$76,160/year

Individuals in communities that fluoridate water save an average of $32 per person in averted dental care for cavities.

3 POVERTY RATE

21.3%

- **Children lose over 51 million school hours** annually due to dental related illness.
- Children **living in poverty are twice as likely to have cavities**, compared with children from higher income households. **One out of five children** in **Warsaw** live in **poverty.**
- **Adults lose over 164 million work hours** annually due to dental related illness.
- Approximately **29% of people (children and adults) have unmet dental care needs** due to the low number of providers in **Dental Health Professional Shortage Areas** (HPSAs).
- **Warsaw** and **Benton County** are included in Missouri's **HPSA** areas.
- **Benton County** has four **(4)** dentists serving a population of **19,627** people. Dentists see on average 2,100 people annually. This means approximately **11,227** people will **not receive dental care or will have to travel out of the county to see a dentist!**

EDUCATIONAL MATERIALS USED DURING CWF INITIATIONS AND ROLLBACKS

Water Fluoridation Basics

The mineral fluoride occurs naturally on earth and is released from rocks into the soil, water, and air. All water contains some fluoride. Usually, the fluoride level in water is not enough to prevent tooth decay; however, some groundwater and natural springs can have naturally high levels of fluoride.

Fluoride has been proven to protect teeth from decay. Bacteria in the mouth produce acid when a person eats sugary foods. This acid eats away minerals from the tooth's surface, making the tooth weaker and increasing the chance of developing cavities. Fluoride helps to rebuild and strengthen the tooth's surface, or enamel. Water fluoridation prevents tooth decay by providing frequent and consistent contact with low levels of fluoride. By keeping the tooth strong and solid, fluoride stops cavities from forming and can even rebuild the tooth's surface.

Community water fluoridation is the process of adjusting the amount of fluoride in drinking water to a level recommended for preventing tooth decay.

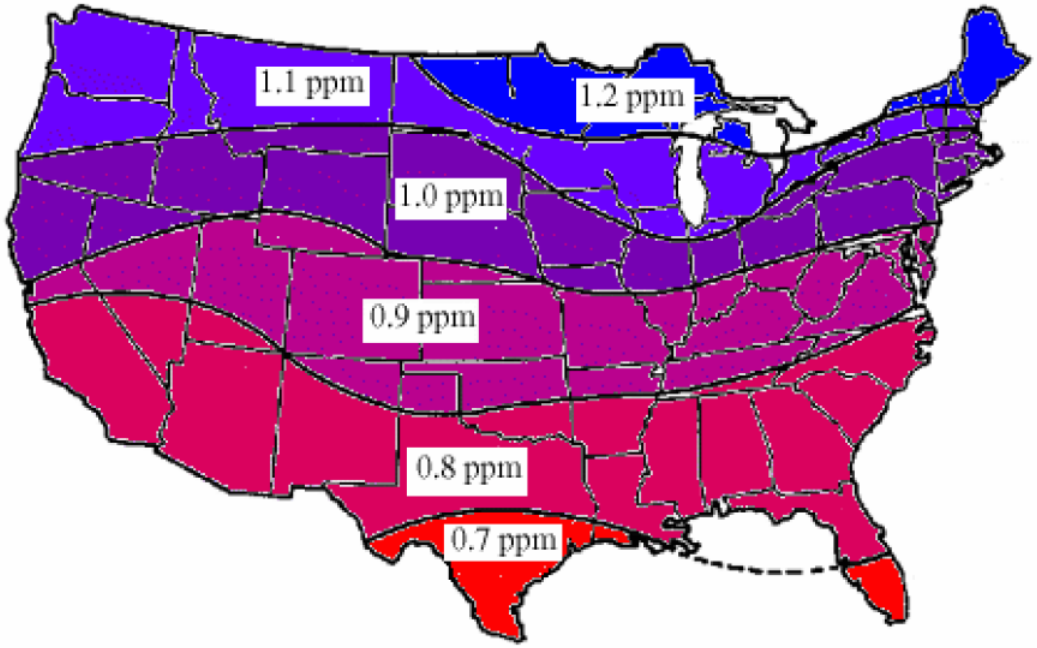
Although other fluoride-containing products, such as toothpaste, mouth rinses, and dietary supplements are available and contribute to the prevention and control of tooth decay, community water fluoridation has been identified as the most cost-effective method of delivering fluoride to all, reducing tooth decay by 25% in adults and children.[1]

Fluoride benefits adults and children throughout their lives. For children younger than age 8, fluoride helps strengthen the adult (permanent) teeth that are developing under the gums. For adults, drinking water with fluoride supports tooth enamel, keeping teeth strong and healthy. The health benefits of fluoride include having:

- Fewer cavities.
- Less severe cavities.
- Less need for fillings and removing teeth.
- Less pain and suffering because of tooth decay.

Source: CDC Fluoridation Website https://www.cdc.gov/fluoridation/basics/index.htm

1962: CWF range adjusted based on climate



1962

- USPHS recommends a sliding scale to adjust levels for increased water consumption – and therefore fluoride – in warmer weather
- Children living in warmer climates drank more water than those in colder climates
- The optimal level varies from 0.7 ppm to 1.2 ppm depending on the local climate

AMERICAN FLUORIDATION SOCIETY

(**Source:** *Timeline for Community Water Fluoridation, CDC website, accessed 12-28-21)*

EDUCATIONAL MATERIALS USED DURING CWF INITIATIONS AND ROLLBACKS

1. This is the first time in U.S. history there has been enough evidence to sue under the TSCA act and file a lawsuit.
    - *Toxic Substance and Cosmetic Act (TSCA)* was attempted to be used in challenge to the EPA to stop CWF in 2013. The EPA evaluation of that petition resulted in dismissal as the challenger had made a **70 times error in** calculation which showed that the petitioner's claims were not founded in science.
    - There have been **over 108 lawsuits against CWF** since this successful public health measure began in 1945.
    - **All 108 lawsuits have ended in losses and with water fluoridation never being ruled illegal in U.S. Courts.**

2. The public is not being informed about what is being put in their water supply, specifically fluoride being added.
    - Information is readily available to the public.
    - **DNR has a website dedicated to informing the public about what is in the water supply.**
    - The Consumer Confidence Report lists everything that is contained in the water, including byproducts of disinfectants.

3. When fluoride is added to the water supply, it is being used as a mass medication and being forced on people.
    - Fluoride is a naturally occurring mineral and is released from rocks into soil, water, and air. Almost all water, ground, surface, and even oceans contain some fluoride. However, the amount of fluoride present in drinking water is too low to be effective in reducing tooth decay. **It is the 13th most common element found in the earth's crust.**
    - Courts have ruled that water fluoridation is not mass medication (***seven court cases***) or forced medication (***three court cases***).

4. The public should have a say about what is being put into their bodies.
    - The public does have a say as to what is ingested into their bodies.
    - When you choose to turn on the tap, you have decided to use the water or not.
    - Legal challenges to *choice:* Seven court cases have dealt with this and found there to be no violation
5. The NTP monograph (report) will show fluoride should be banned in the United States and not put into any public water system.
    - The final NTP monograph has not been released yet.
    - The National Academies of Science, Engineering, and Medicine, NASEM, rejected both the first and second drafts, stating there are serious concerns with studies and evaluations the NTP used as well as concerns with the grading of studies as to their level of bias. There are several other serious concerns NASEM has submitted to the NTP regarding the report.
    - NASEM noted in their last review, the NTP Monograph cannot be used to draw conclusions about exposure to fluoride at the levels maintained in optimally fluoridated drinking water.
    - Within the NTP Monograph it states they used fluoride levels in water at 1.5 mg/L (ppm) or higher, which is over double the amount used in community water fluoridation.
    - Additionally, the NTP Monograph has now been changed from a systemic review to a "state of the science" document and has been determined this state of the science

EDUCATIONAL MATERIALS USED DURING CWF INITIATIONS AND ROLLBACKS

Water Op Fluoridation Quick Responses

1. When someone questions fluoride, how do you respond?
    a. Discuss what you do at the water plant.
    b. Educate that fluoride is naturally occurring in all water sources.
    c. Because of fluoride that is naturally there, you only add a little bit more to bring it to the optimal level, which provides the greatest benefit to people for their oral and overall health.
    d. Direct them to AFS and CDC websites.
2. Engineers are encouraged to take the CDC Fluoridation Online Training (FLO). Missouri has received approval from DNR to count this as 8 hours of CE towards your drinking water certification. Contact Gwen Sullentrup (gwen.sullentrup@health.mo.gov or 573-619-8849) for more information.
3. Meet and greet with the water regulatory people and the fluoridation people (DHSS).
    a. Encourage them to offer and have trainings about CWF.
4. Fluoride is dangerous.
    a. It is as safe as adding Chlorine or any other additive to the water supply. Additionally, fluoride provides an extra benefit in that every dollar invested saves an average of $32 per person in avoided dental treatment per year.
5. Fluoridation equipment is expensive and too costly to maintain.
    a. It is no more costly than having to replace chlorination equipment.
    b. If you install new equipment, make sure the storage tanks, supply lines, and pumps are approved to run fluoride.
    c. Follow maintenance guidelines from the equipment and make sure you change your lines and do the maintenance at the appropriate time. This will extend the life of the equipment.
6. Fluoride is an additive, not a chemical.
7. Fluoride is a naturally occurring substance and we just supplement the natural level and bring it to the optimal level of 0.7 ppm, which is the best level to help avoid tooth decay.
8. Other countries provide a version of CWF by adding fluoride to the optimal level to salt and milk.
9. CWF reaches everyone equally. If you have running water in your home and your water system fluoridates, then you are drinking and cooking with the optimally fluoridated water. Since it is system wide, it does not discriminate based on age, sex, education, or income level. It is an equal opportunity provider.

EDUCATIONAL MATERIALS USED DURING CWF INITIATIONS AND ROLLBACKS

Different fluoride products

1. Fluoride is a mineral that is found in all natural water sources and is the ionic form of the trace element fluorine, which is commonly found in the environment; fluorine reaches water sources by leaching from soil and rocks into groundwater.
2. There are two different ways fluoride is delivered: topically and systemically.
    a. Topically means the fluoride is helping the outside part of the tooth, by "washing" over the surface.
    b. Systemically means the fluoride is absorbed in the body like other vitamins and minerals, bringing the fluoride to the inside part of the tooth and making it stronger from the inside.
3. Topical fluorides strengthen the teeth already present in the mouth, making them more decay resistant (toothpaste, mouth rinses, gels, foams, fluoride varnish applications and silver diamine fluoride).
4. Systemic fluorides are those that are ingested and become incorporated into the forming tooth structures (e.g. fluoride supplements and fluoridated water) and is also able to provide topical protection because fluoride is present in the saliva, which continually bathes the teeth.
5. Topical fluorides are at a much higher strength for a blast of fluoride to the teeth.
    a. Toothpaste has fluoride levels of 1,100 ppm to 1,500 ppm.
    b. Mouth rinse has fluoride levels of 230 ppm.
    c. Fluoride varnish applications can have up to 22,600 ppm with only 2.3-5.0 ppm being applied directly to the tooth surface.
    d. Each of these topical fluorides stick to the teeth but as you drink and eat, they are eroded away and ingested over time to be secreted back out of the body.
    e. These fluorides are limited in what they do as they are there only as long as a person is not eating and drinking.
    f. Not everyone is able to afford a toothbrush, toothpaste or to go to the dentist. Due to this it further increases health disparities and inequities.
6. Systemic fluorides are given at lower strength and continually bathe the teeth in fluoride from the secretion of saliva.
    a. Fluoride supplements may be prescribed for children ages 6 months to 16 years who are at high risk of tooth decay **and whose primary drinking water has a low fluoride concentration**.
        i. These supplements are usually given in the form of tablets or lozenges and are intended to be chewed or sucked on for 1-2 minutes before being swallowed to get the topical benefit.
        ii. After swallowing, the supplements then act in a systemic method as they are absorbed by the body and secreted through the saliva.
        iii. The downside is **all** fluoride supplements **must be prescribed by a medical doctor or a dentist**. These **cannot be obtained without a prescription** and can **be costly if not covered by insurance** (cost around $25 or more for a 120 day supply).
        iv. Only those who visit the dentist or doctor and have a health professional willing to write a prescription and have the funds to afford the prescription will benefit from the supplements.

EDUCATIONAL MATERIALS USED DURING CWF INITIATIONS AND ROLLBACKS

WARSAW PWS

Public Water System ID Number: MO3010835

2021 Annual Water Quality Report

(Consumer Confidence Report)

This report is intended to provide you with important information about your drinking water and the efforts made to provide safe drinking water.

Attencion!

Este informe contiene información muy importante. Tradúscalo o prequntele a alguien que lo entienda bien.
[Translated: This report contains very important information. Translate or ask someone who understands this very well.]

What is the source of my water?

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and groundwater wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

Our water comes from the following source(s):

Source Name	Type
WELL # 2, 3, & 4	GROUND WATER

Source Water Assessment

The Department of Natural Resources conducted a source water assessment to determine the susceptibility of our water source to potential contaminants. This process involved the establishment of source water area delineations for each well or surface water intake and then a contaminant inventory was performed within those delineated areas to assess potential threats to each source. Assessment maps and summary information sheets are available on the internet at https://drinkingwater.missouri.edu/. The Missouri Source Water Protection and Assessment maps and information sheets provide a foundation upon which a more comprehensive source water protection plan can be developed.

Why are there contaminants in my water?

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline (800-426-4791).

Contaminants that may be present in source water include:
A. Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
B. Inorganic contaminants, such as salts and metals, which can be naturally-occurring or result from urban stormwater runoff, industrial, or domestic wastewater discharges, oil and gas production, mining, or farming.
C. Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.
D. Organic chemical contaminants, including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems.
E. Radioactive contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, the Department of Natural Resources prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. Department of Health regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

Is our water system meeting other rules that govern our operations?

The Missouri Department of Natural Resources regulates our water system and requires us to test our water on a regular basis to ensure its safety. Our system has been assigned the identification number MO3010835 for the purposes of tracking our test results. Last year, we tested for a variety of contaminants. The detectable results of these tests are on the following pages of this report. Any violations of state requirements or standards will be further explained later in this report.

How might I become actively involved?

If you would like to observe the decision-making process that affect drinking water quality or if you have any further questions about your drinking water report, please call us at **660-438-5522** to inquire about scheduled meetings or contact persons.

Do I need to take any special precautions?

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

Terms and Abbreviations

Population: 2400. This is the equivalent residential population served including non-bill paying customers.
90th percentile: For Lead and Copper testing. 10% of test results are above this level and 90% are below this level.
AL: Action Level, or the concentration of a contaminant which, when exceeded, triggers treatment or other requirements which a water system must follow.
HAA5: Haloacetic Acids (mono-, di- and tri-chloroacetic acid, and mono- and di-bromoacetic acid) as a group.
LRAA: Locational Running Annual Average, or the locational average of sample analytical results for samples taken during the previous four calendar quarters.
MCLG: Maximum Contaminant Level Goal, or the level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.
MCL: Maximum Contaminant Level, or the highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.
n/a: not applicable.
nd: not detectable at testing limits.
NTU: Nephelometric Turbidity Unit, used to measure cloudiness in drinking water.
ppb: parts per billion or micrograms per liter.
ppm: parts per million or milligrams per liter.
RAA: Running Annual Average, or the average of sample analytical results for samples taken during the previous four calendar quarters.
Range of Results: Shows the lowest and highest levels found during a testing period, if only one sample was taken, then this number equals the Highest Test Result or Highest Value.
SMCL: Secondary Maximum Contaminant Level, or the secondary standards that are non-enforceable guidelines for contaminants and may cause cosmetic effects (such as skin or tooth discoloration) or aesthetic effects (such as taste, odor or color) in drinking water. EPA recommends these standards but does not require water systems to comply
TT: Treatment Technique, or a required process intended to reduce the level of a contaminant in drinking water.
TTHM: Total Trihalomethanes (chloroform, bromodichloromethane, dibromochloromethane, and bromoform) as a group.

MISSOURI
DEPARTMENT OF
NATURAL RESOURCES

EDUCATIONAL MATERIALS USED DURING CWF INITIATIONS AND ROLLBACKS

Academy of Dentistry International
Academy of General Dentistry
Academy for Sports Dentistry
Alzheimer's Association
America's Health Insurance Plans
American Academy of Family Physicians
American Academy of Nurse Practitioners
American Academy of Oral and Maxillofacial Pathology
American Academy of Orthopedic Surgeons
American Academy of Pediatrics
American Academy of Pediatric Dentistry
American Academy of Periodontology
American Academy of Physician Assistants
American Association for Community Dental Programs
American Association for Dental Research
American Association for Health Education
American Association for the Advancement of Science
American Association of Endodontists
American Association of Oral and Maxillofacial Surgeons
American Association of Orthodontists
American Association of Public Health Dentistry
American Association of Women Dentists
American Cancer Society
American College of Dentists
American College of Physicians–American Society of Internal Medicine
American College of Preventive Medicine
American College of Prosthodontists
American Council on Science and Health
American Dental Assistants Association
American Dental Association
American Dental Education Association
American Dental Hygienists' Association
American Dietetic Association
American Federation of Labor and Congress of Industrial Organizations
American Hospital Association
American Legislative Exchange Council
American Medical Association
American Nurses Association
American Osteopathic Association
American Pharmacists Association
American Public Health Association
American School Health Association
American Society for Clinical Nutrition
American Society for Nutritional Sciences
American Student Dental Association
American Water Works Association
Association for Academic Health Centers
Association of American Medical Colleges
Association of Clinicians for the Underserved
Association of Maternal and Child Health Programs
Association of State and Territorial Dental Directors
Association of State and Territorial Health Officials
Association of State and Territorial Public Health Nutrition Directors
British Fluoridation Society
Canadian Dental Association
Canadian Dental Hygienists Association
Canadian Medical Association
Canadian Nurses Association
Canadian Pediatric Society
Canadian Public Health Association
Child Welfare League of America
Children's Dental Health Project
Chocolate Manufacturers Association
Consumer Federation of America
Council of State and Territorial Epidemiologists
Delta Dental Plans Association
FDI World Dental Federation
Federation of American Hospitals
Hispanic Dental Association
Indian Dental Association (U.S.A.)
Institute of Medicine
International Association for Dental Research
International Association for Orthodontics
International College of Dentists
March of Dimes Birth Defects Foundation
National Association of Community Health Centers
National Association of County and City Health Officials
National Association of Dental Assistants
National Association of Local Boards of Health
National Association of Social Workers
National Confectioners Association
National Council Against Health Fraud
National Dental Assistants Association
National Dental Association
National Dental Hygienists' Association
National Down Syndrome Congress
National Down Syndrome Society
National Foundation of Dentistry for the Handicapped
National Head Start Association
National Health Law Program
National Healthy Mothers, Healthy Babies Coalition
Oral Health America
Robert Wood Johnson Foundation
Society for Public Health Education
Society of American Indian Dentists
Special Care Dentistry
Academy of Dentistry for Persons with Disabilities
American Association of Hospital Dentists
American Society for Geriatric Dentistry
The Children's Health Fund
The Dental Health Foundation (of California)
U.S. Department of Defense
U.S. Department of Veterans Affairs
U.S. Public Health Service
Health Resources and Services Administration (HRSA)
Centers for Disease Control and Prevention (CDC)
National Institute of Dental and Craniofacial Research (NIDCR)
World Federation of Orthodontists
World Health Organization

EDUCATIONAL MATERIALS USED DURING CWF INITIATIONS AND ROLLBACKS

Effective - 28 Aug 2016

***640.136. Fluoridation modification, notification to department and customers, when. —** 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.

2. In the case of an investor-owned water system, the entity calling for the discussion of modifications to fluoridation shall be responsible for the provisions of this section.

EDUCATIONAL MATERIALS USED DURING CWF INITIATIONS AND ROLLBACKS

LOGISTICS OF NEW FLUORIDATION PROCESS

- Vote to begin the 90-day notification process;
- Submit paperwork to DNR and DHSS as required by statute;
- Notify customers as required by statute;
- Conduct the 90-day notification period allowing open comments from the public and member systems;
- Have the final vote at the end of the 90-day notification process and vote to begin fluoridation;
- Contract with ODH (DHSS) for the funding to purchase the equipment;
- Complete any required paperwork for consideration by DNR to begin fluoridation;
- Purchase the equipment, additive, and testing supplies;
- Turn all invoices in to ODH for process against the contract;
- Individual systems that require fluoridation testers and supplies will work with ODH to obtain funding for the purchase of these items;
- Start fluoridation on 6/1/2023 to give all customers the added benefit of better oral health and better overall health.