

**Community Water Fluoridation Program Report
2010-2011
Michigan Department of Community Health- Oral Health Program**



This report is to describe activities of the Oral Health Program regarding their Community Water Fluoridation (CWF) Program. The Education/Fluoridation Coordinator is the person most involved in monitoring the objectives for this program and is the author of this report.

Community water fluoridation is the process of adjusting the natural fluoride concentration of a community's water supply to a level that is best for the prevention of dental caries. In the United States, community water fluoridation has been the basis for the primary prevention of dental caries for many years. Grand Rapids, Michigan was the birthplace of community water fluoridation for the world and for 65 years this preventive practice has been recognized as one of the 10 great achievements in public health of the 20th century. [CDC 1999a].

In 2010 the Michigan population was 9,883,640. A large number of those individuals, 7,991,631, are served by community water systems. There are 549 community water systems providing fluoridated water to 7,152,682 people. Eighty-nine percent of people on community water systems have access to fluoridated water, which is almost 80% of the state's total population.

The goal of the MDCH-Oral Health Community Water Fluoridation Program **is to promote a quality Community Water Fluoridation Program through the State of Michigan with the Oral Health Program and the Department of Environmental Quality (DEQ), to reduce dental disease in our state.**

There is a three year Interdepartmental Agreement with DEQ and MDCH. This agreement formalizes the collaboration between the two agencies to increase community water fluoridation and fluoridation surveillance measures. Working together, DEQ and MDCH have agreed to meet regularly, collect pertinent information on each water system, promote fluoridation training to all engineers and operators, encourage annual inspections of fluoridation equipment and processes, maintain safety in regards to fluoridation and promote continuation of fluoridation in community water systems. A new agreement will be drawn in 2013.

Of significance for this report are activities of the State Fluoridation Advisory Committee (FAC) housed within the Michigan Oral Health Coalition (MOHC). The FAC is crucial for feedback and support to the Oral Health Program's CWF program. Also of significance are the activities

of the MDCH Oral Health Program to maintain existing communities with community water fluoridation and the efforts of the Fluoridation Equipment grants as support with this.

These were the main objectives/activities for the 2010-2011 CWF Program:

- A. Update State Fluoridation Plan that implements CDC grant requirements and submit requested reports.
- B. Monitor monthly fluoride levels on basis consistent with WFRS.
- C. Track progress of incorporating CDC EARWF practices.
- D. Provide new or replacement equipment to communities looking to add/maintain fluoridation.
- E. Meet Healthy People 2010/2020 goal of 75%/79.6% of population on Community Water Fluoridation.
- F. Provide education and promotion of Community Water Fluoridation.
- G. Maintain all above objectives through management and at a comprehensive level that meets or exceeds Healthy People objectives.
- H. Initiate a Fluoridation Coordinator within DEQ.
- I. Promote testing of individual wells for fluoride levels.
- J. Implement a study on fluorosis levels in the state.
- K. Develop a CWF Program evaluation plan.

This report will describe each objective and give detail on the activities under each, give a time frame activities were carried out, the progress made, and the performance measures. All of these objectives will be monitored and managed by the Fluoridation Coordinator. These objectives are based on the Centers for Disease Control and Prevention (CDC) Cooperative Agreement with MDCH-Oral Health.

Objective A: Update State Fluoridation Plan that implements CDC grant requirements and submit requested reports.

We have a state fluoridation plan developed in 2010. This Plan discusses infrastructure, collaborations and partners, evaluation of the program and includes the workplan objectives with activities and time frames clearly addressed. Our performance measure is to have the Plan approved by the State Fluoridation Advisory Committee on an annual basis. This was approved January 2010. The Plan will be updated annually and progress is currently being made to update the 2012-13 Plan. All reports and the status of the State CWF Plan are entered into the CDC reporting system, Management Overview for Logistics Analysis and Reporting, (MOLAR), on a monthly basis.

Objective B: Monitor fluoride levels on monthly basis consistent with WFRS

The state Fluoridation Coordinator currently receives monthly averages for fluoride levels from each community water system once a year from DEQ usually in February for the previous year. This is then entered into WFRS by the Fluoridation Coordinator or a student assistant. The Fluoridation Coordinator has continued to press DEQ for twice a year submissions with no success. The optimal reporting submission would be to receive these readings on a monthly basis from each water system directly to the Oral Health Program but the DEQ does not want more responsibility added to the already burdensome reports each system is currently submitting.

The Fluoridation Coordinator, after receiving the yearly reports, reviews each water system for high and low levels and reports these systems to the DEQ. It is then the DEQ's responsibility to contact the water system and determine ways to correct the levels. Michigan fluoride level range was previously set at .9-1.5. This past year we have reset the range in WFRS to reflect .7-1.2 ppm with the optimal range at .7 ppm. The performance measures are to increase the number of communities receiving CDC annual awards, especially those with 12 consecutive months of optimal fluoride levels. As soon as the CDC final recommendation is released for the fluoride level, then Michigan will adjust the range again.

Awards: For 2010 we had 65 communities that achieved the CDC award for having optimal levels of fluoride for 12 consecutive months. That is ten more than the previous year. These communities each received a certificate from CDC and a congratulatory letter from the Oral Health Program Director. Michigan had two systems that received their 50 year awards: Adrian and Wyoming.

Objective C: Track Progress of incorporating CDC EARWF practices

EARWF is the acronym for Engineering and Administrative Recommendations for Water Fluoridation. The DEQ has the responsibility for monitoring similar standards set by the State of Michigan. The Michigan standards closely follow the EARWF standards. These can be found in Michigan's *Suggested Practice for Water Works Part 10, Section 9- Fluoridation*. The Oral Health Program receives the *Sanitation Survey Report* from DNRE every three years. This includes information about the status of fluoridating water systems. The annual reports from DEQ also include the names of water systems that have discontinued fluoridation or initiated new fluoridation processes.

Objective D: New or Replacement Equipment to communities looking to add fluoridation

We received \$60,000 from Delta Dental to initiate the second year of grants for new or replacement fluoridation equipment. We identified all non-fluoridated communities with populations over 1000. This was easily accomplished by utilizing WFRS and accessing the report on non fluoridated systems. It was much more difficult to determine which systems were in need of replacement equipment as the DEQ did not have this information. It was decided to just send the RFP out to all systems with the intent to interest those needing replacement equipment.

An RFP was released October 1, 2010 with applications due March 1, 2011. This proposal allowed communities to apply for reimbursement of fluoridation equipment costs purchased between June 1, 2011 and September 30, 2011. The RFP was sent to all systems with 1000 or over populations and with contact names and e-mail addresses. It was also posted on the Oral Health website, the Michigan Section of AWWA website, the State of Michigan website, in the newsletters of the MI AWWA and the Michigan Oral Health Coalition.

Six communities sent in applications, all for replacement equipment. A competitive process to review and score the applications took place April 7, 2011. From the scores collected, and some adjusting with the assistance of DEQ, all 6 communities were allocated funds.

2010 Fluoridation Equipment Grantees:

Name of Grantee	Award Amount	Amount Used
Bangor	\$9633	\$9417
Board of Water and Light-Lansing	\$16,524	\$16,524
Escanaba	\$1796	\$1608
Ionia	\$19,124	\$19,124
Lake Odessa	\$3000	\$3000
Munising	\$10,056	\$10,056

The grantees have 6 months from the date of invoice submission for reimbursement to have the equipment installed, operational, and their report sent in to MDCH. As of March 30, 2011 all the grantees had everything completed. The Fluoridation Coordinator is following through with the rest of the grantees to insure compliance and reporting within the allotted timeframe.

Objective E: Meet Healthy People 2010/2020 goal of 75%/79.6% of population on Community Water Fluoridation

According to the 2011 WFRS 510 report for Michigan, we had 89.4% of the population in community water systems drinking fluoridated water. We continue to exceed the target for the Healthy People Objective. Michigan continues to promote and support community water fluoridation in those areas currently not fluoridating. Through the Michigan Oral Health Coalition we had identified those communities not fluoridating and had sent information packets with studies promoting fluoridation and a copy of the Fluoridation Equipment RFP.

Objective F: Education and Promotion of Community Water Fluoridation

One of the activities under this objective is to integrate oral health education into the state trainings for operators, engineers, local water treatment directors, and utility organizations. There are currently discussions to include the Fluoridation Coordinator into the state trainings on a yearly basis but DEQ thinks they have this covered. We will continue to pursue this.

Another activity under this objective is to send at least one state district engineer each year to the CDC fluoridation training offered two times a year. We allow funding for this through the CDC Cooperative Agreement. This is an ongoing project until all district engineers in the state have taken the national training. We were able to send 4 state district drinking water engineers to these trainings during the 2010-11 fiscal year. Pat Cook, our State Drinking Water Specialist will attend in spring 2012 as well as our program Fluoridation Coordinator, Susan Deming in the fall of 2012.

The Oral Health Program developed a CWF brochure in 2008. In conjunction with another activity the brochures were sent to all local health departments in Michigan stating they were free

while available to these health departments to distribute to the community. The Fluoridation Coordinator has distributed over 2000 of these brochures through requests from health departments, individual dental offices, and numerous conferences. There are continued requests to continue to provide these for public education.

As another ongoing activity the OHP continues to update CWF fact sheets as needed. We have a special folder in our data base that keeps current research resources, bullet point fact sheets and pertinent information that communities and the public can use to promote CWF. They are reviewed on an annual basis and updated if necessary by the OHP and the State Fluoridation Advisory Committee.

The State Fluoridation Advisory Committee is crucial for promotion and education of community water fluoridation. Our objective was to meet at least twice a year with one of those meetings face to face. The FAC has its own workplan that does, to some extent, follow the OHP workplan. We met twice in the 09-10 year and decided to better promote CWF and step that up to 4x/year for the 10-11 year. Face to face meetings will be in conjunction with the Michigan Oral Health Coalition meeting in June of each year.

Along with the State Fluoridation Advisory Committee, the OHP will continue to give support and education to communities and the public dealing with anti fluoridation issues. This is an ongoing activity depending on the needs of each community. There has been increasing activity in communities thinking of discontinuation of fluoridation due to costs and some concerned citizens.

We had 4 communities this past year discontinue adding fluoride to their water supplies: Village of Newberry, City of Galesburg, Village of Marcellus, and City of Mt. Clemens. We are working with communication with the water system operators and state engineers to better inform of a consideration before it is voted out. All of these systems decided to discontinue without our knowledge beforehand. Writing letters to the city council after the fact often does not produce any changes.

Progress has been made to update the OHP website to include more information on CWF. There is a heading for CWF with a few resources. The 2010-11 RFP was posted as well under Grant Opportunities. Future plans would include a direct box link to store fluoridation resources and FAC agendas and minutes.

Objective G: Maintain all above objectives through management and at a comprehensive level that meets or exceeds Healthy People objectives

The main activity under this objective was to maintain the Oral Health Program Fluoridation Coordinator position to make sure someone was responsible for carrying out the objectives. We received continued funding through the CDC Collaborative Agreement to further fund this position through 2011. Having a dedicated person follow through with the activities for each objective has been the success of our CWF program. Building relationships with DEQ, the MOHC and the FAC has been crucial to maintaining our high status for populations served from CWF.

Objective H: Fluoridation Coordinator with DEQ

This is one objective that has been a dream of the OHP. We wish there was state funding that would support the hiring of a full time fluoridation engineer with the DEQ. Other states have this position. This makes it easier to coordinate with the Oral Health program, maintain optimal fluoride levels and monitor the safety of equipment and administration. At this point no funds are available and the state budget for the foreseeable future does not appear to make this objective a reality. This objective was removed for 2010-11 as not feasible at this time.

Objective I: Testing of individual wells for fluoride levels

Even though the majority of Michigan residents are on community drinking water systems, there are still over 2 million people living in rural areas that may not have access to fluoridated water. In order to encourage private well testing for the public we have encouraged all health departments to carry individual chemical test sample bottles to hand out to the public. A link to the state lab to obtain these sample kits is posted on the Oral Health Program website and on the Michigan Oral Health Coalition website. We sent out a survey in 2009 asking each health department whether they stock these sample kits. (See Objective L). Over 94% of health departments said they do carry these kits.

Another activity we would like to pursue is to initiate a public awareness campaign to promote individual well testing in the state. The FAC has initiated some discussion on designing a brochure to inform the public on the importance of this. An informal survey was taken at the Infant Oral Health Summit October 1, 2010 to assess dental and medical care provider's knowledge regarding their practice use of fluoride. Some of the questions asked included:

- Are you aware what percentage of your patients drink regularly from fluoridated or from non-fluoridated water sources?
- Do you regularly evaluate a patient's fluoride intake (water, toothpaste, fluoride vitamins, fluoride rinses) and discuss with the patient?
- Do you feel well-informed enough to make recommendations to your patients regarding their (systemic or topical) fluoride exposure?
- Do you ever prescribe fluoride drops for babies?

Objective J: Study on fluorosis levels in the state

First thing we did was add questions regarding fluorosis into the 2010 Count Your Smiles Survey of 3rd graders across Michigan. Screeners were trained in identifying fluorosis and the Dean's fluorosis index was used. Results from the 2010 Count Your Smiles Survey suggest that Michigan does not have an unusual amount of fluorosis so this objective will be removed for the following year workplan.

Objective K: CWF Program Evaluation

The activity for this objective is to get an evaluation plan in place for the CWF program. Evaluation objectives were developed for the Oral Health Community Water Fluoridation Program by an Oral Health Program Coordinator and currently our evaluation person. The 2010-11 CWF Evaluation Plan was ready by September 2011 and is based on the MDCH- OHP

evaluation plan. There are 11 evaluation objectives with three general questions to answer as a summary. Updates to the Plan are being made for 2011-12.

Each objective describes:

- ✓ What type of data is needed
- ✓ Where the data will come from
- ✓ How the data will be collected
- ✓ When the data will be collected
- ✓ What will be done with the data
- ✓ How and when results will be shared
- ✓ Who is responsible for each evaluation objective
- ✓ If and when evaluation objective was completed and by whom

Our performance measure was to have this plan in place by December 2010 and that has been accomplished. In the 2010-11 CWF workplan more detailed evaluation activities are described.

Looking Ahead:

The work plan for the Oral Health Program Community Water Fluoridation Program for 2011-12 will have similar objectives as this past year:

- We are currently updating the CWF Plan
- We are continuing to collaborate with the Michigan Department of Environmental Quality, the Michigan Oral Health Coalition and the State Fluoridation Advisory Committee
- We will continue to work with DEQ on acquiring fluoride levels for each water system and monitoring of safety issues
- We do have funding for another fluoridation equipment RFP that was released October 1, 2011.
- Efforts will continue to exceed the Healthy People objective of 79.6% population on fluoridated drinking water
- Promotion and education of CWF will continue to remain a top focus.
- Plans to begin a public awareness campaign to educate on testing private wells have begun with the Fluoridation Advisory Committee.
- From the evaluation of the 2010-11 program adjustments and changes will be made to better enable the OHP to improve its CWF program



For further information on the Michigan Oral Health Community Water Fluoridation Program please check our website: www.michigan.gov/oralhealth or contact:

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