



The Commonwealth of Massachusetts
Executive Office of Health and Human Services
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June 29, 2015

To: Water Superintendents

From: Massachusetts Department of Public Health Office of Oral Health

Re: Updated Fluoridation Monitoring and Reporting

Dear Water Superintendents:

The Massachusetts Department of Public Health Office of Oral Health is responsible for the monitoring and surveillance standards of adjusted community water fluoridation in order to assure that fluoridation levels are maintained. Recently, there has been a change in the optimal fluoridation level that does not compromise good dental health. The new optimal level of fluoride in drinking water, as recommended by the Center for Disease Control and Prevention (CDC), is now 0.7 mg/L instead of 1.0 mg/L. On May 1, 2015 the Massachusetts Department of Environmental Protection (MassDEP) notified all Public Water Suppliers (PWS) of the new optimal level for fluoride in drinking water and encouraged all PWS with fluoride programs to implement the new optimal level as soon as practical and to notify MassDEP and Massachusetts Department of Public Health (MDPH) of any changes to their programs to implement the new optimal level. The CDC is working on an operational tolerance guidance associated with the new optimal level. This research includes analyzing over 1.5 million months of water facility operational data, conducting an extensive literature review of other past studies, and consultation with the American Water Works Association. When this information is final, the operational tolerance guidance will be provided to you by MDPH and MassDEP.

The Office of Oral Health works closely with the Massachusetts Department of Environmental Protection (MassDEP) Drinking Water Program to review the fluoridation monitoring and surveillance standards, the fluoridation reporting forms and our ability to provide technical assistance to the fluoridating public water systems. As a result of the CDC issuance of the new optimal level for Fluoride, MassDEP and MDPH have updated the standard Fluoride Reporting Forms that PWS are required to submit on the 10th day of each month to MassDEP and MDPH. The three (3) updated reporting forms are:

- Daily Fluoridation Monitoring
- Weekly Distribution System Fluoridation Monitoring
- Split-Sample Fluoridation Monitoring

These forms are available electronically at:

<http://www.mass.gov/eea/agencies/massdep/service/approvals/fluoride.html> , and may be submitted to the Office of Oral Health via regular mail

Please note that the three (3) reports may not be submitted electronically due to the fact that a signature must accompany each form.

Daily Fluoridation Monitoring - Form A:

This form is to be used by the public water system (PWS) that adds fluoride treatment chemicals to report finished water fluoride concentrations from the treatment plant. All pumped fluoridated source water **MUST** be tested daily for fluoride at the entry point to the distribution system or after the point of fluoride application. The only change on this form is noting that the new recommended level of Fluoride is now 0.7 mg/L. **This form is also available in an Excel format for electronic tabulation of total and averages.**

Weekly Distribution System Fluoridation Monitoring – Form B:

This form is to be used by the PWS that adds fluoride treatment chemicals to report fluoride concentrations in the distribution system of the PWS or consecutive public water systems served by the treated water. According to the CDC, distribution sampling should be done throughout the system at points of consumption. When reviewing the instructions on the back of this form, you will note that the sample locations should be varied. Each week during the month, the PWS must collect at least 1 sample from a tap(s) in the distribution system for a total of at least 4 distribution samples per month. At least one distribution sample should be collected at a location near a school. This needs to be done to ensure that the children of your community are receiving the optimal benefits of fluoridation for dental health. **If your system is providing water to other consecutive PWS you must evenly distribute your 4 samples across the entire combined distribution system.** For example:

PWS A is the public water system providing fluoridated water to two consecutive PWSs B and C. These are PWS A's consecutive systems. During each month in week 1, PWS A should collect and analyze one (1) distribution sample near a school in PWS A. In week 2, PWS A should collect and analyze one (1) distribution sample in PWS B and one (1) distribution sample in PWS C. The samples should be collected at varied times and should be near a school. The fourth distribution sample can be collected anywhere PWS A chooses in the entire system.

Any one of the distribution samples may also be used as the monthly split-sample (see below).

Split-Sample Fluoridation Monitoring:

This form is to be used by the public water system (PWS) to evaluate the accuracy of the PWS fluoride testing equipment or laboratory. Each month, at least one (1) distribution sample **MUST** be split and analyzed by the PWS and a laboratory certified by MassDEP for fluoride analysis. **One community may not do the laboratory testing of another community to satisfy the split-sample testing requirement; the split-sample testing must be done between the PWS that adds the fluoride chemical and a laboratory certified by MassDEP for fluoride analysis.**

Please note at the bottom of this form it reads: “PWS must contact the Office of Oral Health at 617-624-5573 within seven (7) days of learning of this checked result.” The purpose of this request is to have the PWS compare their split sample results with the certified laboratory results and initiate remediation in testing techniques, recalibration of monitoring instruments, etc., reporting back to the Office of Oral Health before the PWS is formally contacted by the Department of Public Health.

Training

In addition to the updated reporting forms the Office of Oral Health, MassDEP and New England Water Works Association periodically host a water fluoridation training course. I recommend that each PWS participate in one of these training courses to receive the most up-to-date information on the operation and maintenance of fluoridation metering systems and pumps, testing methods, troubleshooting, etc. Check the NEWWA website at <http://www.newwa.org/#>. You may contact Heather Benabbou at: Heather.Benabbou@state.ma.us, or visit the MassDEP website at: <http://www.mass.gov/eea/agencies/massdep/service/approvals/fluoride.html> for more information on Fluoridation.

Fluoride Issues That Require Reporting and Emergency Response Planning

The CDC has specific recommended actions PWS must follow if ever there is an over-feed of fluoride treatment. (See the enclosed attachment). These recommendations include reporting these situations to both DPH and MassDEP. In addition, all systems that add fluoride chemicals must have and practice their Emergency Response Plan. PWS may use their MassDEP required Emergency Response Plan to meet their DPH responsibilities for emergency response planning. The PWS Emergency Response Plan should address typical emergencies including exceeding the primary fluoride MCL, spillage and over feeding of chemicals, back siphonage, etc. The PWS must report to DPH immediately or within 24 hours of learning of a fluoride chemical emergency. The DPH emergency contact number during normal work hours is 617-624-5573. The PWS must also immediately or within 24 hours of learning of the emergency report to the MassDEP regional office. Outside of normal working hours DPH can be contacted via the Massachusetts Division of Epidemiology and Immunization Emergency Call Center at 617-983-6800 and MassDEP can be contacted via the MassDEP Emergency contact number 1-888-304-1133.

As an important member of the dental team, each PWS and their water operators play an important role in preventing dental disease and unnecessary oral pain and infection. Based on over 60 years of scientific evidence and the recommendations that have been put forth from the Office of the U.S. Surgeon General and the CDC, the Department of Public Health acknowledges adjusted community water fluoridation at optimal levels as the most safe, efficient and cost-effective measure for preventing dental caries for a community.

If you have any questions on completing the forms or need assistance in fluoridation, please feel free to contact me at 617-624-5573 or Heather.Benabbou@state.ma.us. I look forward to working with you to improve the oral health of the residents of your community.

Sincerely,

Heather E. Benabbou, Fluoridation Coordinator MDPH Office of Oral Health
250 Washington Street, 5th Floor
Boston, MA 02108

Enclosures:

1. Form A: Daily Fluoridation Monitoring;
2. Form B: Weekly Distribution System Fluoridation Monitoring;
3. Form C: Split-Sample Fluoridation Monitoring;
4. US Centers for Disease Control and Prevention *Engineering and Administrative Recommendations for Water Fluoridation*, 2015;
5. Recommended Fluoride Overfeed Actions; and 6. Resource Guide for Water Fluoridation in Massachusetts

Cc: MassDEP Drinking Water Program: Yvette DePeiza