Fluoridation Surveillance

In 1977, the Commonwealth of Kentucky mandated that all public water supplies that serve more than 1,500 individuals be fluoridated. The statute also establishes surveillance and enforcement provisions as well as penalties for non-compliance. Ninety percent of Kentucky’s citizens (~4.2 million) are benefiting from optimally fluoridated water. Surveillance activities involves split, bi-monthly water samples sent from each water company and tested by state-certified laboratories chosen by the water company and/or the state laboratory for verification. The fluoridation compliance team (3.5 FTEs stationed in various regions of the state) enter the laboratory data into mobile computers, communicate with water company operators concerning unacceptable fluoride levels of finished water, perform on-site visits at least once each year, and make technical assistance calls as needed. In addition, each fluoride staff member closely monitors the 2 elementary schools that have their water supply fluoridated to assure that schoolchildren are receiving fluoridated water at levels recommended by the CDC and check equipment on at least a quarterly basis. Fluoride staff are competent in plumbing, electrical repair and maintenance as well as water works operations.

Additionally, each fluoride staff member closely monitors two elementary schools that have their water supply fluoridated on-site to assure that schoolchildren are receiving fluoridated water at levels recommended by the CDC and check equipment on at least a quarterly basis. Fluoride staff are competent in plumbing, electrical repair and maintenance as well as water works operations. Each staff member is supplied with a vehicle, spare parts, tools and chemicals to perform their duties of surveillance and enforcement. Funds to support the fluoridation surveillance and enforcement system are derived from the state general fund as required by statute. The total cost of surveillance, excluding the cost of the water companies, is about $350,000 per year or about ten cents per citizen per year. Compliance rates by water companies average 99 percent due to effective and consistent monitoring by the fluoridation compliance team.

Lessons Learned:

Kentucky continues to expand public water lines which will result in more and more citizens having access to optimally fluoridated water. This department has no influence on this effort but stands ready to ensure compliance with fluoridation requirements as the more rural areas of the state gain access to public water. The current compliance rate is at a very high level (99%) but the staff strives to reach 100% each year.

Anti-fluoridation organizations are trying to overturn the statute that mandates fluoridated water supplies but have been unsuccessful to date. We cannot let our guard down with respect to individuals and organizations who vow to overturn the statute as being a mass medication statute. Without continuous monitoring and enforcement, the compliance rate would be considerably less and the citizenry would not benefit from optimally fluoridated water.

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