## IMPORTANCE OF REGULAR DENTAL **CHECKUPS**

by Dr. Mostafa El-Sherif

Regular dental exams are very important not only for good teeth but also for your general health.

There are a wide variety of diseases where your dentist can find signs and symptoms by examining your mouth.

Some examples of systemic diseases with signs or symptoms in the oral cavity are syphilis, tuberculosis, measles, herpes, anemia and AIDS.

Other problems that a dentist checks for during a regular exam are physical or chemical irritants such as cheek biting, overgrowth of tissues, drugs or food burns, chewing tobacco lesions, radiation burns, infections of the jaw bone, fungal infections and tumors.

Regular check ups are recommended twice a year for patients with systemic diseases but if more check up visits are needed they should be determined by your dentist.



Dr. El-Sherif is a professor in restorative dentistry at Tufts and Oklahoma University with a PhD in addition to being a Doctor of Dentistry. He speaks at national and international conferences around the world on implants, crowns, bridges, and cosmetic surgery.

## Is Your Well Water Corrosive? Bow Drinking Water Protection Committee, Cynthia Klevens, P.E.

Corrosive water is an aggressive water quality condition that can dissolve metals at an excessive rate from metallic plumbing fixtures and appliances in contact with the water. Water quality factors which contribute to make groundwater corrosive are low pH, low alkalinity, high chlorides and other dissolved ions which increase water conductivity.

Corrosion impacts include objectionable taste and staining, but most importantly, corrosive water conditions must be evaluated and addressed to avoid potential lead exposure particularly to young children and pregnant women. Corrosion impacts to plumbing can cause more frequent replacement of fittings, water heaters and well pumps. The only way to establish if you have lead or other contaminants in your water is by testing at a certified water laboratory. A list of certified laboratories in New Hampshire is available by a simple web search for "NH certified water laboratories.'

Even in relatively new homes, brass fixtures purchased prior to January 2014 could have up to 8% lead, and copper plumbing with lead solder installed up until 1986 contained 50% lead. As our understanding of the health effects of lead, and the mobilization of lead in drinking water have advanced, various federal acts have lowered the allowable levels of lead in drinking water plumbing. The most recent Reduction of Lead in Drinking

Water Act prohibits the commerce or installation of any drinking water fixtures with lead greater than 0.25% as of January 4, 2014 (EPA 2015).

Although lead in drinking water is rarely the sole cause of lead poisoning, it is important to prevent all sources of potential lead exposure. Lead is a serious health concern especially for young and unborn children, as their bodies absorb lead at higher rates. The most serious effects of repeated ingestion even to low levels of lead can affect children's mental and physical health include lower IQ, hyperactivity, and speech problems (ATSDR 2007, DHHS 2015, NHDES 2012).

A recent study by the U.S. Geological Survey (USGS 2016, NHBR 2016) advises that New Hampshire's groundwater wells have a "very high prevalence" of potentially corrosive groundwater, along with 11 other states mostly along the East Coast. The study is based on testing of 21,000 groundwater sites across the country between 1995 and 2015, and ranked corrosivity based on a Langelier Saturation Index (LSI) less than 0.5, Chloride to Sulfate Mass Ratio (CSMR) greater than 0.5, and Alkalinity less than 50 mg/L. According to the study, about one-third of groundwater wells in the US are "potentially corrosive" based on the LSI index, and about one-tenth have a high prevalence of potentially corrosive water based on the CSMR-Alkalinity levels, and

## **Bow Heritage Day**

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Starting at 11:00 AM **Presentations & Meeting House Tours** \*\* What do you know about our Granite Foundations \*\* \*\* Visit and Talk with our Blacksmith \*\* Enjoy Lunch-Old Fashioned Beef Stew & Cornbread By the Bow Men's Club 12:00-1:00 PM Enjoy The Music & Displays During Lunch

1:00 PM Service Memorial Bell Ringing **BBMH Supporter Plaque Presentation** If You Were Not Here For Last Year's Pies, you Missed a Great Selection of Some of the Finest Pie Ever Made!!



Celebrate our Heritage And Enjoy

**The Festivities** 



can occur in all 50 states and the District of Columbia.

The Bow Drinking Water Protection Committee endorses NHDES' private well testing recommendations to prevent impacts of corrosion and other potential contaminants in your well water, as follows:

- Flush your tap every day for 1 minute before collecting water for drinking and cooking;
- \_ Always use the cold water tap as lead dissolves more quickly in hot water;
- Regularly remove and clean the aerator in any faucets where water is used for consumption;
- Test your well water every year for bacteria, nitrate and nitrite acute contaminants (\$27 at the State of NH certified laboratory);
- Test your well water every 3 years for the "standard analysis" suite of 14 parameters including lead, copper, arsenic, uranium, iron, manganese, pH and chloride (\$85 at the State of NH certified laboratory);

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Protect your well from salt contamination by reducing or eliminating softener brine discharges, reducing salt application in driveways, and directly storm water drainage away from your well.

The Bow Drinking Water Committee provides outreach to Town residents on protecting the quality and quantity of our drinking water sources, and can be reached at Bowdrinkingwater@gmail.com and www.bow-nh.com, Boards and Committees.

## References

Allard, E (2016). NH Business Review Federal study warns of corrosive potential of NH groundwater, July 14, 2016. http:// www.nhbr.com/July-22-2016/Federalstudy-warns-of-corrosive-potential-of-NHgroundwater/

ATSDR (2007), Toxic Substances Portal, ToxFAQs for Lead, http://www.atsdr.cdc. gov/toxfaqs/tf.asp?id=93&tid=22 Belitz, K., Jurgens, B.C., and Johnson, T.D. (2016). U.S. Geological Survey Scientific Investigations Report 2016-5092. Potential corrosivity of untreated groundwater in the United States. https://pubs.er.usgs.gov/ publication/sir20165092

EPA (2015), Section 1417 of the Safe Drinking Water Act: Prohibition on Use of Lead Pipes, Solder, and Flux. https://www. epa.gov/dwstandardsregulations/section-1417-safe-drinking-water-act-prohibitionuse-lead-pipes-solder-and, webpage update November 2015.

NHDES (2009), Fact Sheet WD-DW-GB-3-4 Corrosivity of Water Supplies. http://des.nh.gov/organization/commissioner/pip/factsheets/dwgb/

NHDES (2012) Fact Sheet WD-ARD-EHP 10 Lead Health Summary. http://des. nh.gov/organization/commissioner/pip/ factsheets/ard/documents/ard-ehp-10.pdf NH DHHS (2015) Fact Sheet 2-3-15, NH Healthy Homes and Lead Poisoning Prevention Program, Lead and Children, http://www.dhhs.nh.gov/dphs/bchs/clpp/ documents/children.pdf

Nguyen, C.K., Clark, B.N., Stone, K.R., and Edwards, M.A. (2011). Role of Chloride, Sulfate, and Alkalinity on Galvanic Lead Corrosion. Corrosion Journal, June 2011.