



## S.C. DHEC and S.C. Dental Association Partner to Reduce Mercury in the Environment

Mercury is a persistent and bioaccumulative toxin in the environment. Dental offices represent less than 1 percent of all mercury emissions. Once in streams and rivers, some of the mercury is transformed to a more toxic form, methylmercury. The methylmercury can accumulate in fish tissue in concentrations thousands of times higher than the concentrations in surrounding water. Due to the high concentrations in some fish species, there is a risk to human health if greater than recommended amounts of the fish are eaten. Fish advisories have been created in S.C. to inform the public of safe consumption limits for species in certain areas of the state.

Studies have shown that dentists are the leading contributor of mercury to wastewater. Dental offices can help to reduce mercury emissions to the environment by installing amalgam separators and following best management practices as recommended by the American Dental Association. Amalgam separators serve to filter out 95 to 99 percent of mercury.

The S.C. Dental Association and the S.C. Department of Health and Environmental Control have partnered to encourage installation of amalgam separators. This partnership, which started in the spring of 2010, recognizes the leadership of specific dental offices that have voluntarily installed amalgam separators as a way to improve the environment. A second query by the SCDA is still in process and as of November 2010, 260 member dentists have been identified as leaders in taking this step to benefit their community and state. These dental offices received a certificate of recognition from SCDA and DHEC, and recognition on the SCDA website.

The SCDA plans to encourage more dental offices on a yearly basis to install the amalgam separators. These offices will be recognized for their efforts to reduce mercury. In response to these actions, DHEC Commissioner Earl Hunter said, "We greatly appreciate the dentists who have risen to the challenge of environmental improvement in South Carolina and we request that all dentists consider taking this important step."

It is important to note that amalgam remains a safe and effective dental treatment option for patients. In the present economy of extremely limited resources, this partnership serves to improve the environment by reducing mercury emissions at minimal cost to both SCDA and DHEC. Although the dental offices initially spend resources as part of their volunteer commitment, the amalgam separators continually reduce mercury emissions with small yearly maintenance fees. SCDA and DHEC will continue to share the positive impact of amalgam separator installation in an effort to increase the number of dental offices with separators in the state.

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