The rise and fall of mercury

By Anita Vazquez Tibau, USA

When most people hear the word "mercury" most think of the planet. There are many products that contain mercury, such as blood pressure cuffs, thermometers, batteries, and CFL light bulbs. There are processes that use mercury and produce mercury pollution, like coal fire plants, artisanal small-scale mining and chloralkali plants. However, the mercury that truly affects the global population is the mercury that is implanted in billions of people’s teeth.

Mercury dental fillings commonly referred to as silver fillings or amalgam composes of about 50 percent mercury, along with other metals.

It is indisputable that mercury in all its forms is toxic. Mercury exposure has been linked to neurological problems such as Alzheimer’s or Parkinson’s disease. Mercury can also cross the placenta and reach the central nervous system of the foetus during pregnancy. The element also accumulates in the gastrointestinal tract, oral cavity, lungs, thyroid gland, pituitary gland and other target organs.

Since the United Nations Environmental Programme’s Minamata Convention on mercury was finalized, the world has been taking serious action to eliminate products and processes that use or contain mercury. While dental mercury amalgam is listed as a “phase down” product, many countries are taking proactive steps to eradicate its use as soon as possible.

The dentistry industry can no longer ignore the fact that mercury from dental fillings creates an unnecessary risk of exposure, not only to the patients, but also to the dental workers. This can become the litigation in the not too distant future that proves catastrophic for the dental industry, insurance carriers, and governments. Mercury lawsuits can far exceed that of tobacco litigation, or more recently, asbestos legal actions.

Norwegian dental workers who have been injured by mercury due to occupational exposure are now being compensated, in both public and private practices. In fact, the court has reduced the criteria for compensation after the acknowledgement of the original assessment was deemed too strict, therefore allowing for more claims to be considered or re-examined. The legal victory of the dental workers in Norway is being examined in other countries too in order to see what the potential for replicating the case strategy for other dental workers who have been affected by mercury exposure.

A landmark settlement was recently reached in the dental mercury case of long-time activist Freya Koss, who established the Pennsylvania Coalition for Mercury-Free Dentistry. The coalition is a Philadelphia-based consumer advocacy group that aims to educate the public on health, occupational and environmental hazards of dental mercury. Settled quietly in the Supreme Court of the New York State, the dental malpractice suit was based on neurological injuries Koss sustained as a result of the dentist’s “Deviation from Standard of Care” during the removal and replacement of an existing mercury amalgam filling. Under court orders, Koss is unable to discuss the terms of the settlement, nor the details of the defendant. However, as the first US case settled in favour of an injured dental mercury patient, she is hopeful that, on some level, a precedent will be set to compensate others who have been injured too and that the use of mercury in dentistry will be banned worldwide.

According to an article published on 1 May 11, 85 per cent of Euros voted for the removal of mercury amalgam fillings. Michele Rivasi (Greens/EFA), a member of the World Alliance for Mercury Free Dentistry and a Member of the European Parliament, with support from the European Environmental Bureau, held a press conference on May 7 to disseminate the results of the consultation that was organized by the European Commission on the implementation of the Minamata Convention on Mercury.

The results show that Europeans do not want an application of mercury fillings and at least 85 per cent of citizens want to get over with the use of mercury fillings in dentistry as quickly as possible. Rivasi said: “Citizens have expressed a massive demand for amalgam to be removed. The institutions cannot exclude such a pressing appeal. The European Commission must now make every effort to ensure that dental amalgam is removed from the market in accordance with the will of the people.”

Recently, every dental school in North America that teaches the use of mercury silver fillings was sent a legal notice that they were not permitted to expose any student to the Environmental Protection Agency’s (EPA) maximum mercury air quality standards promulgated to protect the public, since students are not employees. Many of the schools have mistakenly been using Occupational Health and Safety standards to evaluate exposure levels and at the same time, not complying with any of the other numerous requirements this law states. Failure to comply with EPA standards may be considered tortious conduct, which may potentially render these teaching facilities liable for possible injuries of students who are exposed to mercury.

Similar to mercury thermometers, being banned in the US and other countries, mercury use in dentistry is declining fast. The question remains, how soon will mercury be banned completely in dentistry? 

Anita Vazquez Tibau has traveled the world for over a decade as a speaker, working with various non-governmental organizations as an international advocate against the use of mercury in dentistry. She is the Executive Director of Californians for Green Dentistry, a grassroots organization that has successfully garnered resolutions from the city councils of three California cities asking dental professionals to eliminate the use of mercury in their practices. She has testified at city, state, national and international levels on dental mercury.