Europe Ticker +++

Minamata Convention

End of amalgam by 2034



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At the conference on the Minamata Convention held in Geneva in November, more than 150 countries agreed to phase out mercury-containing dental amalgam fillings. This means that a material which has been a staple of everyday dental practice for generations is now facing its final demise, reports AFP. The World Health Organisation (WHO) ranks mercury among the ten most dangerous environmental toxins, toxic to both humans and nature alike. The international treaty on which the decision was based aims to reduce global exposure to mercury and its compounds, thereby protecting both human health and the environment. The convention was adopted in 2013 and came into force in 2017; more than 150 countries have signed it to date. Some countries have already banned amalgam, whilst others, notably a group of African nations, called in Geneva for an earlier phase-out by 2030. Resistance came primarily from India, Iran and the UK, which demanded longer transition periods. In the end, a compromise was agreed: a global phase-out by 2034.

Source: Dental Tribune

The trace element zinc in teeth

An indicator of bone density

Using complementary microscopic techniques, a team from Charité Berlin, TU Berlin and HZB has determined the distribution of natural zinc within the tooth. The result: as the porosity of the dentine increases towards the pulp, the zinc concentration rises by a factor of 5 to 10. This finding helps to better understand the influence of zinc-containing fillings on dental health and could lead to improvements in dentistry. The trace element zinc is almost entirely absent in some regions, whilst it is highly concentrated near the pulp. Until this study, it was not known how high the concentration of natural zinc is or how it is distributed in healthy teeth. The team, led by Prof. Dr Paul Zaslansky of Charité Berlin and Dr Ioanna Mantouvalou of HZB, set out to answer this question. However, discarded human teeth were not suitable for the study, as they are usually contaminated with zinc from treatments or toothpaste. They therefore used cattle teeth, which are produced in large quantities at abattoirs. Infrared analyses carried out with the IRIS team at BESSY II had shown that cattle teeth bear a strong resemblance to human teeth. At the same time, such teeth are much younger and have no history of dental treatment or brushing. "We were surprised to find that zinc can likely be used as a sensitive indicator of gradients in material density, which can change over the course of a lifetime. Density is linked to the mechanical performance of bone tissue and should be neither too high nor too low to fulfil its function in the human body. Using highly sensitive methods such as X-ray fluorescence, we may be able to monitor changes in density as part of the ageing process," says Zaslansky.

Source: Helmholtz Centre, Berlin

References:
Ioanna Mantouvalou, Leona Johanna Bauer, Vinh-Binh Truong, Yannick Wagener, Frank Förste, Oleksandra Marushchenko, Stephan Werner, Franco Lizzi, Frank Wieder, Timo Wolff, Birgit Kanngießer, Paul Zaslansky: Quantitative micro-XRF combined with X-ray imaging reveals correlations between Zn concentration and dentin tubule porosity across entire teeth; DOI: 10.1002/VIW.20250173



Unhealthy food and alcopops

EU considers taxes

The European Commission is planning EU-wide levies on highly processed foods and alcopops from 2026—according to a draft of the Cardiovascular Health Plan. The "Safe Hearts Plan" was presented by the European Commission on 16 December 2025 as part of a comprehensive health package. It is the first joint European approach to tackling cardiovascular disease—the leading cause of death in Europe—and forms part of the European Health Union. The plan addresses the key challenges relating to cardiovascular disease across the EU, with a focus on the specific needs of vulnerable groups such as children, young people and women. It is designed to support Member States and stakeholders in the areas of health promotion and prevention, early detection and screening, as well as treatment and care (including rehabilitation) for cardiovascular diseases. Background: in some Member States, the number of deaths due to cardiovascular diseases is eight times higher than in others. The "Safe Hearts Plan" aims to close existing gaps in research and innovation, harness the potential of digital and innovative technologies such as artificial intelligence, and reduce health inequalities between Member States, regions and population groups.

Source: European Commission

OECD report on per capita health expenditure

Germany ranks first, followed by Austria

At €5,414 in 2023, per capita health expenditure in Germany is the highest among EU countries, according to the OECD report on European countries. Germany is followed by Austria at €4,901. Private healthcare expenditure in Germany consisted largely of out-of-pocket payments, which accounted for 11% of total healthcare expenditure and were thus well below the EU average of 16%. The 2023 OECD report paints a picture of a post-pandemic Europe that continues to grapple with reduced life expectancy, mental health issues, rising costs and strain on the system.

Source: OECD Report 2023

E-health score in Europe

Belgium and Estonia lead the way

Digital health services are gaining in importance across Europe. The COVID-19 pandemic has prompted many countries to introduce or significantly expand video consultations. Since then, the number of teleconsultations has continued to rise. Access to electronic health records and digital health literacy are at the heart of the digital transformation of healthcare systems. The European Union has set itself a clear target for e-health. By 2030, all EU citizens are to have access to their electronic health records. However, the current situation varies greatly between countries. According to the European Commission's report "Digital Decade 2025: eHealth Indicator Study—Final Report", access to electronic health records (EHRs) in the EU reached 83 per cent in 2024. This indicator, also known as the composite e-health score, sets 100 per cent as the benchmark for a fully mature state with comprehensive public access to electronic health data. The score thus rose by four percentage points from 79 to 83 per cent compared to 2023 and is eleven points above the 72 per cent figure recorded in 2022. Among 29 European countries, including the 27 EU Member States as well as Norway and Iceland, the EHR score ranges from 25 per cent in Ireland to 100 per cent in Belgium and Estonia. The Netherlands has the second-lowest score at 65 per cent—Ireland thus remains an outlier at the lower end. Denmark (98 per cent), Lithuania (95 per cent), Malta (94 per cent), Poland (92 per cent) and Norway (91 per cent) are also among the top performers. All achieve figures of over 90 per cent. In these countries, electronic records are available to a very large proportion of the population.

Source: Euro-News