Let's Join Hands to
Phase Out Mercury Amalgam

July 6, 2025 | Vijayawada, Andhra Pradesh

Toxics Link
for a toxics-free world

Let's Join Hands to Phase Out Mercury Amalgam – Andhra Pradesh Consultation

July 6, 2025, Murali Fortune, Vijayawada
Organised by: *Toxics Link in collaboration with the Indian Dental Association (IDA), Andhra Pradesh State Branch*

Background and Rationale

Mercury use in dental amalgam continues to be a global health and environmental concern. Dental amalgam, composed of nearly 50% elemental mercury, is still commonly used in restorative dental procedures in India due to cost, tradition, and curriculum legacy.

Globally, mercury is recognized as a potent neurotoxin, bioaccumulative in the environment, with harmful impacts on human health and ecosystems. The Minamata Convention on Mercury, ratified by India in 2018, requires nations to phase down dental amalgam use and promote safer alternatives. Countries like the EU member states, Bangladesh, Nepal, and the Philippines have already implemented restrictions or bans on dental amalgam.

The Andhra Pradesh consultation, jointly organized by Toxics Link and IDA Andhra Pradesh, aimed to accelerate dialogue among practitioners, educators, and policy advocates toward promoting mercury-free dentistry in the state.

Objectives of the Workshop

- To sensitize dental practitioners on the health and environmental risks of mercury in dentistry.
- To discuss India's commitments under the Minamata Convention and the implications for dental practice.
- To explore mercury-free alternatives and discuss practical challenges in shifting away from amalgam.
- To promote curriculum reform, public awareness, and stakeholder collaboration for a safe dental future.

Inaugural Session

The workshop commenced with a welcome address by Mr. Satish Sinha, Associate Director, Toxics Link, who provided an overview of the broader environmental health landscape and set the context for mercury phase-out. His opening remarks were focused on the importance of collaborative approaches in healthcare and environmental sustainability.

Following the welcome, Dr. Mualidhar Reddy, President, IDA Andhra Pradesh, and Dr. L. Krishna Prasad, Past President, IDA Head Office, delivered special addresses. They highlighted the

commitment of IDA AP towards environmentally responsible dentistry and stressed the need for continuous education and policy engagement.

Technical Sessions

Session 1: Mercury-Free Dentistry – The Minamata Convention and Mercury Hazards
Speaker: Mr. Satish Sinha, Associate Director, Toxics Link

Mr. Sinha delivered the first technical presentation focusing on the global and national imperatives for mercury phase-out. He highlighted:

- The Minamata Convention on Mercury, which mandates gradual elimination of mercury-based products and practices, including dental amalgam.
- The toxicological profile of mercury, its neurotoxic effects, and environmental persistence.
- Global mercury-related disasters such as Minamata in Japan and Kodaikanal in India.
- How mercury vapour is continuously released from amalgam fillings during placement, removal, and even routine chewing.

Mr. Sinha emphasized the need for continued advocacy, curriculum revision, and public awareness, framing mercury-free dentistry as a shared responsibility between healthcare providers and policymakers.

Session 2: Occupational and Environmental Concerns from Mercury Amalgam Use
Speaker: Dr. CH Ram Sunil, Professor, Sibar Institute of Dental Sciences, Guntur

Dr. Ram Sunil focused on the occupational health risks for dental professionals and environmental implications:

- Mercury exposure leads to neurological and kidney disorders.
- Dental practitioners and assistants are at higher risk due to prolonged exposure to mercury vapour.
- Lack of amalgam separators in small clinics leads to mercury entering wastewater systems.
- He emphasized the importance of safe handling, ventilation, and proper waste disposal protocols.

This session was chaired by Dr. P. Ramesh.

Session 3: Mercury Amalgam Alternatives and Practical Considerations

Speaker: Dr. Madhu Varma, Professor & HOD, Department of Conservative Dentistry, Vishnu Dental College, Bhimavaram

Dr. Varma provided insights into mercury-free restorative dentistry:

- Alternatives to mercury amalgam include resin composites, glass ionomer cement, and ceramics.
- These materials are biocompatible, aesthetic, and safer for both patients and practitioners.
- Challenges include cost perception, technique sensitivity, and curriculum lag.
- He called for integrating mercury-free techniques into clinical training and adopting a patient-centered approach.

This session was chaired by Prof. Dr. Muralimohan.

Key Recommendations

- Revise the Dental Council of India (DCI) syllabus to prioritize mercury-free restorations.
- Train students in modern, biocompatible restorative materials.
- Encourage patients to ask for mercury-free options.
- Provide training workshops on technique-sensitive procedures.
- Facilitate affordable access to alternative materials.
- Engage the Ministry of Health and Family Welfare and the National Dental Commission.
- Work towards India's mercury phase-out roadmap aligned with global commitments.

Participants

The meeting saw active participation from:
- Senior dentists and office bearers of IDA Andhra Pradesh
- Dental college faculty and students
- Private practitioners

Conclusion and Way Forward

The Andhra Pradesh consultation marked a significant step towards phasing out mercury-based dentistry. The dental community acknowledged the necessity for change, while recognizing the barriers to adoption.

The session concluded with a vote of thanks by Dr. Ajay Benarji Kotti, Secretary, IDA Andhra Pradesh, who thanked the speakers, participants, and Toxics Link for their commitment to advancing safe dental practices in the state.