



01st July 2020

SUBMISSION ON MERCURY PHASE OUT BY STAKEHOLDERS OF ZAMBIA TO THE MINAMATA SECRETARIAT

Zambia is A Party to the Minamata Convention on Mercury, the Zambian government unites with the key Zambian stakeholders – the dental profession (Zambia Dental Association), the environmental health profession (Zambia Institute of Environmental Health), and the NGO (Children's Environmental Health Foundation) focused on implementing the Minamata Convention – to jointly submit this letter.

Zambia led the way in ending amalgam for children. Fully twenty years ago, at the turn of this century, the dentists of Zambia discovered that glass ionomers provided superior oral health care for children:

- These alternatives can be done in rural areas outside of urban clinics, but amalgam can only be done in clinics with sufficient electricity.
- These alternatives are minimally invasive, particularly important for children, whereas amalgam commonly requires the removal of good tooth matter.
- These alternatives are safer for the dentist and dental worker, who are not exposed to mercury vapors while working.

Thus **Zambian dentists ended amalgam for children 20 years ago**. The decision has major health and environmental benefits.

- The children of Zambia thus have grown up without this mercury device implanted in their bodies, and without the mercury exposure that the most vaporous of metals inherently will do. Mercury is a neurotoxin and a nephrotoxin, meaning that only a rule of precaution makes sense when it comes to children.
- These alternatives are environmentally friendly, protecting the Zambezi and other rivers from its mercury run-offs. Amalgam is such a major global pollutant of mercury, affecting soil, water, air, and food, that it has its section in the Minamata Convention annex.

The campaign has now begun to complete the phase-out of dental amalgam, to end amalgam for the adults. Recently, in the Southern Province, these same stakeholders held a conference, presided over by the Province's Permanent Secretary and attended by Provincial Health Director Choma District Health Director, Choma General Hospital Senior Medical Superintendent and Representative of the Choma Municipal Council Town Clerk to plan the phase-out as a model for the nation's other provinces.

As a developing nation with no coastline, and as a nation with no choice but to devote its resources to being a front-line state against colonialism for the first quarter-century of its nationhood, Zambia early on was forced into self-reliance and its ingenuity. Here, then, is a result: to provide superior dental care, its dentists ended amalgam for children many years before most other nations, and the nation is now developing a plan to phase out its use entirely.

Zambia has focused intensely on the full implementation of the Minamata Convention. Mr. David Kapindula of Zambia Environmental Management Agency (ZEMA) served on the Bureau during the negotiations and early conferences of the parties, then was President of the Third Conference of the Parties Dr. Christopher Kapeshe, President of the Zambia Dental Association, participated in COP3 in Geneva, Switzerland via speaking at the African side event and other functions.

ALTERNATIVES TO DENTAL AMALGAM

In Zambia the following alternatives to dental amalgam are available

1. Glass ionomer cement

- These are readily available in Zambia and are supplied by local distributors
- They are technically feasible to use as they can be manipulated without the use of electricity and are a key material in the Atraumatic restorative technique used even in the most remote areas of our country.
- Economically the cost around \$15 to \$17 per item
- Environmental friendly material
- Health advantage it releases fluoride which promotes tooth strength and prevents secondary dental caries, No need to cut healthy or sound tooth structure

2. Composites

- These materials are readily and locally available and are supplied by local distributors
- They are technically feasible to use, can be manipulated without electricity but may need electricity to trim the excess. They may be used in both anterior and posterior teeth. They are esthetically good as they are tooth-colored
- Economically they cost around \$40 to \$60
- The material is environmentally friendly
- Health advantage- they are tooth-colored, they chemically bond to the tooth surface, therefore, there is no need to cut sound tooth more than necessary to retain the filling

3. Cention N

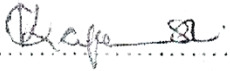
- It is an alkasite which utilizes an alkaline filler, capable of releasing acid-neutralizing ions
- It is a tooth-colored material and used as a direct filling material for posterior load-bearing restoration
- Economically it cost around \$24.50
- Environmentally friendly material

- Health advantagestrong material for posterior load-bearing restoration, high flexural strength, the alkaline fillers are capable of releasing acid-neutralizing ions.

The undersigned stakeholders unanimously agreed to the above submissions:

Zambia Dental Association (ZDA)

Name: Dr. Christopher Kapeshi

Signed: 

Zambia Institute of Environmental Health (ZIEH)

Name: Kennedy Chishimba


Signed:

Children's Environmental Health Foundation (CEHF)

Name: Michael Musenga

Signed: 

Ministry of Health (MOH) :

Name: Jackson Mungu

Signed: 