

# Dental Mercury in Argentina

## Reflection and Information Exchange Session

Salud sin Daño / Health Care Without Harm  
Ministry of Health  
Panamerican Health Organization  
United Nations Development Programme



Cabinet of Ministers,  
Buenos Aires City, Argentina, 21st October – 2010

## CONCLUSIONS

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### Discussion paper on working proposals

#### **On behalf of representatives from both governmental and non-governmental organizations present at this conference and considering:**

- That mercury poses a threat to the health of the general population and exposed workers in particular;
- That mercury is also an important source of environmental pollution;
- That the World Health Organization considers amalgams used in dentistry as the most important, non-industrial source of mercury vapor emissions to the environment;
- That mercury is a potential occupational hazard for healthcare workers who are members of the dental team and that there is a need to improve the process of quantification, characterization and reduction of the exposed population;
- That it is also necessary to reduce the amount of pollution from dental practices released into the environment;
- That in order to achieve these objectives, it is convenient to undertake actions that will contribute to the progressive replacement of mercury in dental amalgam with safer and healthier alternatives, a process that has already begun in some health facilities in the country;
- That until that goal is met, it is essential to modify practices and procedures that will lead to improved health and environmental conditions associated with the use of mercury,

**Resolved to agree on the following points:**

- 1- Establish, as a first prevention action whenever possible, replacement of mercury from dental practices, with the understanding that the best way to reduce all risks is to start by eliminating the danger itself, and that the best waste possible is the one that is not generated at all;
- 2- Incorporate those NGOs interested in the issue, in an advisory role, to the process of developing the "national plan to progressively restrict the use of mercury in medical and dental practices and equipment," coordinated by the Oral Health Office of the National Ministry of Health;
- 3- Manage and regulate through the appropriate and competent governmental body, and until mercury substitution in dentistry is completed, the development - within a period of no more than a year - of protocols and guidelines that will:
  - 3.1- Standardize operating procedures regarding the use of mercury in dental amalgams and thus minimize the exposure of patients and health workers;
  - 3.2- Standardize operating procedures for the recovery of mercury found in dental amalgam waste prior to release to the environment. These wastes include used amalgam capsules, amalgam that has not been used during dental restoration and amalgam waste retained in collectors and filters as well as extracted mercury containing teeth;
  - 3.3- Standardize a procedure for cleaning of accidental spills for those working areas where dental work with mercury is commonly performed,
  - 3.4- Standardize procurement procedures for the purchase of better devices with safer packaging. Put in place in each work unit, procedures for safer temporary storage of devices and waste.
- 4- Take into account necessary changes in the curricula of undergraduate courses for dentists and dental assistants in order to address exposure to mercury. Concepts should include toxicity, exposure and monitoring, use of personal and group protective equipment, safer procedures, equipment and clothing required when working with mercury that minimize the exposure of students and others not covered by occupational protection rules;
- 5- Carry out information, training and communication campaigns on mercury in dentistry for the professional and technical community, emphasizing on the risks of exposure, the right to have protection at work and the responsibility of work groups in terms of waste emissions to the environment. Complement these with other media campaigns aimed at the general population, supported by the necessary scientific evidence, in order to respond to the concerns raised about the risks associated with the use of mercury in dentistry;
- 6- Recommend that the agreed actions are implemented in the framework of health promotion, education and prevention programs, which have the objective to decrease the need for treatments that require dental restorations;
- 7- Research conducted by scientists and health professionals has not been able to show that exposure to mercury vapors from dental amalgam in the mouths of

patients is sufficiently high to cause adverse health effects or to have significant association with degenerative diseases of the Central Nervous System. Nevertheless, further studies should be carried out, particularly taking into account vulnerable people (pregnant women, small children, the immunocompromised, atopic or those with previous renal or neurological pathology).

**At the same time, Participants also agree to ask:**

**I - the Ministry of Labour, Employment and Social Security:**

- I.1 To better manage and control working and environmental conditions for those areas where exposure to mercury takes place. This effort should include agreements to carry out joint actions with the Ministry of Health;
- I.2 Set deadlines to monitor environmental measurements, which are all necessary to optimize the safety when working with mercury (Law 19587 and Reg. Dec. 351; Res. 295/03) from ventilation and structural equipment at dental offices (floors, working tables, wastewater systems) as well as the personal protective equipment.
- I.3 Provide information on the degree of compliance with the labor legislation on Occupational Risk (Law 24557/95 and Reg Dec. 170/96) and of the medical and biochemical monitoring for the prevention, control and diagnosis of mercury-related diseases (Dec. PEN SRT 658/96 and Resolution 37/10), understanding that the need to frequently carry out laboratory tests is a fundamental prerequisite for the early detection of the effects of being exposed to this heavy metal. As from now, we expect an update on the situation of the exposed population, including and setting their job characteristics, cases of occupational diseases in both number and magnitude, Hg levels in blood / urine / appendages curves, existence and use of PPA compliance, practice with safer procedures, etc.
- I.4 Information on the extent of compliance of the current legislation on occupational risk (Law 24557/95 and Dec. Reg 170/96) regarding the training status of exposed workers, either through their ART (Aseguradora de Riesgo del Trabajo), their insurance companies or directly through employers.
- I.5 ARTs are considered responsible, together with the employer on the accuracy and truthfulness of the data resulting from the risk assessment, in order to know, in a reliable way, the number of establishments and workers exposed to mercury in dentistry (dentists, dental assistants, cleaning workers from oral health areas, etc.)

**II- The Secretary of Environment and Sustainable Development:**

Information on compliance with current legislation (Law 24051 of hazardous wastes and their component Y29 mercury and mercury compounds); studies on the potential recycling of mercury; protocols for the segregated collection of

mercury waste used in dentistry, and criteria for establishing sites for temporary storage or final disposal.

**III-** To the industry and trade related to dental supplies and equipment:

To minimize the gap between access to mercury and to its alternatives by promoting research and development of new safer and healthier materials and encourage working paths to design better storage, better mercury intermediate storage, better management of waste containers and dental waste, avoiding emissions to the environment.

Buenos Aires, October 21<sup>st</sup> 2010  
Environmental Health Department