



# **FDI World Dental Federation**

# **Use of Dental Amalgam**

## **Intergovernmental Negotiating Committee 2**

January 24, 2011

Chiba, Japan

Dr. Peter Cooney Chair, Public Health Section, FDI Chief Dental Officer, Canada

http://www.healthcanada.gc.ca/ocdo





- Federation of almost 200 member National Dental Associations and specialists groups from 134 countries worldwide.
- Represents more than 1 million dentists.
- The Public Health Section of FDI World Dental Federation is composed of Chief Dental Officers (or equivalents) from 140 countries (i.e. government representatives).
- Governed by a Council of delegates from member associations who are elected by a General Assembly at the Annual Congress.

www.fdiworldental.org





Patient Safety

- Longevity
- ➢Quality of Care
- Environmental Considerations
- ≻Cost
- ➤ Ease of Handling
- Esthetics







- > \$12.8B spent annually on oral health.
- Almost 50% of 6 years old Canadians and 96% Canadian adults have history of dental decay\*.
- I out of 3 Canadians have a dental need, and 1 out of 6 say they cannot address this need because of financial reasons.\*
- > Yet dental decay is almost 100% preventable.

\* Canadian Health Measures Survey 2010: http://www.hc-sc.gc.ca/ahc-asc/branch-dirgen/fnihbdgspni/ocdo-bdc/project-eng.php#a1





- Extensive Review led to 1996 Health Canada Recommendations\*. Now on product labels.
- Avoid in baby teeth of children if possible.
- If possible, avoid in pregnant women and people with impaired kidney function.
- Use safe handling practices and provide information to patients.

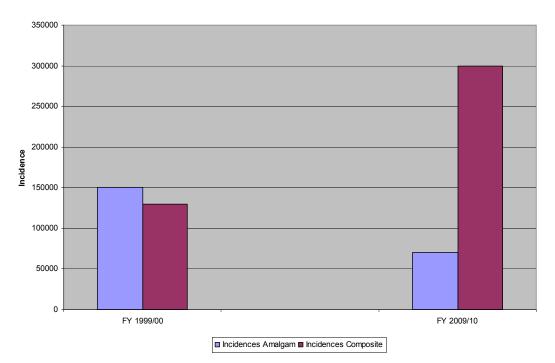
\* The Safety of Dental Amalgam, Health Canada, 1996 http://www.hc-sc.gc.ca/dhp-mps/md-im/applic-demande/pubs/dent\_amalgameng.php





# 1999 – 2009 Pattern of Amalgam Use in Large Publicly Insured Dental Program in Canada

The Incidence of Total Amalgam and Total Composite Resin Restorations for FY 1999/00 and FY 2009/10



### http://www.hc-sc.gc.ca/fniah-spnia/pubs/index-eng.php





Canadian Mercury Guidance Values		CHMS Identified Value* (geometric mean)
- Blood (total mercury) General Population:	20 μgHg/L	0.69 μgHg/L
-Vulnerable Populations (proposed provisional guidelines):	8 μgHg/L	
- Urine (inorganic mercury) Total Population:	7 μgHg/L	0.22 μgHg/L

- For inorganic blood mercury, no geometric mean available as 40% of samples below levels of detection.

\* CHMS: http://www.healthcanada.gc.ca/ocdo

Note: United States 2003/2004 National Health and Nutrition Examination Surveys indicates total blood mercury 0.79 µgHg/L; urinary mercury 0.447 µgHg/L.

http://www.cdc.gov/nchi/nhanes.htm





- In Canada, where alternatives to use of mercury in products exist (e.g. in light switches, thermometers) these were targeted for reduction.
- Where no suitable alternatives exist (e.g. dental amalgam) a legislated protocol for best environmental management practices was introduced.
- Proposed regulations under the Canadian Environmental Protection Act will exempt the use of dental amalgam, but there will be labelling and reporting requirements, and emissions provisions.
- The phase down of dental amalgam releases through the implementation of environmental best management practices and the phase down of dental amalgam use through promotion of oral health and use of viable alternatives where appropriate has occurred.





# FDI Resolution – Brazil, September 2010

# It be resolved that,

FDI World Dental Federation as the worldwide, authoritative and independent voice of the dental profession calls on government to foster and ensure the phase up of effective prevention for dental caries and associated health promotion programmes. This should be linked to preventive disease management, which will result in the phase down of use of current restorative materials, including dental amalgam. These measures will ensure optimal oral health, particularly for those most disadvantaged and in need of treatment.

It be further resolved that,

Amalgam is a safe and highly effective restorative material. To maintain and protect global public health, a phase down of amalgam will be only appropriate when an alternative and suitable restorative material is available.





Recognizing the importance of preventing disease, that governments foster and ensure appropriate prevention of dental decay. Phase-down of amalgam use can occur where appropriate and where affordable alternative materials exist.







- Recognize and respect the differences between countries (due to differences in decay rates, economic limitations, capacity and numbers of oral health professionals) and ability to phase-down use.
- Ensure continued safe use of dental amalgam.









- Mercury from dental amalgam is a very small component of the environmental problem, but can still be properly managed.
- A country example has demonstrated how specific recommendations were made in 1996.
- Amalgam use has continued in Canada and in 10 years we have seen a large reduction in use.
- Legislating best management practices has been successful for public health.
- Results of blood/urine testing on Canadians shows very low mercury exposure levels.
- Increased emphasis on prevention and clear guidelines for mercury use can safeguard the health of the public.

