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# Dental Amalgam Waste Reduction Initiative in Ontario



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# Dental Waste Management Training Tool for the Dental Team

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- Recent Developments on Dental Amalgam wastes
- Facilitation of the Working Group
- Information Review Committee
- Next Steps & Challenges



# Why Dental Waste Management for the Dental Team

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- Needs of the Dental Team
- Focus on all hazardous dental wastes including Mercury Dental Amalgams
- No tool exists that covers the full scope of dental wastes in curriculum
- Dentists are often the employers and decision makers



# Why Dental Waste Management for the Dental Team (cont.)

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- Dental Assistants are usually the front line workers dealing with dental wastes
- Dental Hygienists deal with dental wastes to a lesser degree





# Regulatory and Other Developments

- MOU respecting the implementation of the CWS on Mercury for Dental Amalgam Waste
- City of Toronto's new sewer use bylaw
  - 0.01mg/L of Hg undiluted effluent concentration
  - effective June 30, 2002
  - ISO 11143 certified amalgam separator
  - pollution prevention plans - Dec. 31, 2001
  - Jan. 2002 - 40% to 55% reduction in [Hg] from 2001 average



# Regulatory and Other Developments (cont.)

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- Toronto Fate of Mercury Amalgam Study
  - conducted by University of Toronto
  - study confirmed that ISO 11143 amalgam separators are effective (up to 99.4% removal)
  - however ISO 11143 amalgam separators may not assure compliance with 0.01mg/L bylaw
  - concluded that regulation by wastewater concentration is impractical due to temporal and other factors



# Dental Waste Management Working Group

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## ■ Purpose

- EC facilitate the development of a dental waste management training tool to reduce dental amalgam and other dental wastes
- establish partnerships with stakeholders
- support CWS on mercury amalgam

## ■ Scope

- professional associations, schools and practitioners in Ontario



# Dental Waste Management Working Group (cont.)

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- Working Group members
  - Ontario Dental Association
  - Ontario Dental Hygienist Association
  - Ontario Dental Nurses & Assistants Association
  - University of Toronto, Faculty of Dentistry
  - University of Western Ontario, School of Dentistry
  - George Brown College, Dental Program





# Dental Waste Management Working Group (cont.)

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- Working Group members
  - Niagara College, Dental Program
  - Durham College, Dental Program
  - Royal College of Dental Surgeons of Ontario
  - College of Dental Hygienists of Ontario
  - Ministry of the Environment and Energy
  - City of Toronto
  - Environment Canada - EPB-OR



# Dental Waste Management Working Group - Progress

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- Partnerships established and expanded
- Outreach tools - website etc...
- Scope of Training Material established
  - address all hazardous dental wastes
  - historical perspective
  - reflect CWS-MOU agreement
  - support provincial hazardous waste management regulations and municipal bylaws



# Dental Waste Management Working Group - Progress (cont.)

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## ■ Final Product

- effective and readable - should be useful to practicing members of the dental team
- two versions - a comprehensive teacher's guide and a simplified learner's guide
- web based version
- self learning kit for rural practitioners
- up to date - adaptable to changing regulatory requirements and standards



# Information Review Committee

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## ■ Purpose

- convened to review relevant information resources available
- report to working group with draft

## ■ Information Resources being reviewed

- ODA's Best Management Practices manual
- MOU for mercury in dental amalgam waste
- professional standards of practice
- regulatory documents



# Information Review Committee Progress

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- ODA's BMP manual being used as foundation document
- Regulatory framework and definitions updated and refined
- Structure of training material refined
  - use of flowcharts, checklists, glossary
- CSA's standards on Sharps Containers



# Information Review Committee Progress (cont.)

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- General Office Waste management
- Alternatives to chemical cleaning agents
- List of certified hazardous waste haulers
- Stores of elemental Hg management issue





# Information Review Committee Members

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- Faculty of Dentistry, University of Toronto
- Royal College of Dental Surgeons of Ontario
- College of Dental Hygienists of Ontario
- Ontario Dental Association
- George Brown College, Dental Assistant Program
- Ministry of the Environment and Energy
- Environment Canada, EPB-OR



# Next Steps

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- Complete information review & prepare 1st draft of training tool
- Working group consider recommendations and resolve information gaps/options
- Working group to develop assessment tools in support of the training tool
- Final Draft of training tool prepared by December, 2002





# Challenges

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- Design final product to be updatable
- Obtaining consensus (working group)
- Ownership of final product
- Financing publication and distribution
- Time Constraints
- Access to certified hazardous waste haulers