

# Forward

This oral health document was conceptualized and drafted at the *Caribbean Atlantic Regional Dental Association* (CARDA) meeting held in Dominica in 1995, with the assistance of the *Pan American Health Organization*, *Regional Office of the World Health Organization* (PAHO/WHO), and the *Caribbean Community* (CARICOM) Health Desk. Further work on the document was done at the 1997 CARDA meeting in Belize, with subsequent working group activity in Barbados. *Dr. Rahul Naidu* (UWI School of Dentistry, Trinidad) and *Dr. Fanny Thompson* (Chief Dental Officer, Ministry of Health, Barbados) revised the document in December 2003 under the aegis of PAHO, along with input from the *Heads of Dental Services* in the region.

Special credit must also go to *Dr. (Sr.) Rosalie Warpeha* of the *Dental Auxiliary School* in Jamaica, for highlighting the role of oral health practitioners in disease prevention; *Dr. Lesley St. Rose*, Senior Dental Surgeon, Saint Lucia, for agreeing to edit the final document and *Ms. Petra Straughan* for providing all the graphic designs and the final lay-out of the document.

The aim of this document is to provide a framework for PAHO's technical cooperation interventions in oral health in the English-speaking Caribbean. It is also aimed at providing guidelines for developing and implementing a strategy to improve oral health in the countries by focusing on issues of treatment needs, oral health promotion, disease prevention and the use of appropriate methodologies for oral health care.

Special thanks to all who have worked tirelessly to make this product a reality. It is my sincere hope that this strategic policy document will serve the purpose for which it is intended.

I take this opportunity to reiterate the commitment of PAHO/WHO and in particular, the team at the *Office of the Caribbean Program Coordination*, to support our partners in the Caribbean to achieve success in oral health care.

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# Preface

This strategic policy document is designed to help oral health practitioners working in the community to be able to better monitor the burden and impact of oral diseases, use of the oral health care delivery system, and the status of community water fluoridation at the national level.

It is the mission of all oral health practitioners in the English-speaking Caribbean to continue working to increase public awareness of the importance of oral health care to total health. In this, we must not fail. This can only be done by increasing the visibility and public understanding of oral health and by undertaking initiatives to develop, implement and facilitate specific supportive educational, informational and service programs. This mandate was highlighted in a statement by the former U.S. Surgeon General, Dr. C. Everett Koop in 2000: "You're not healthy without good oral health". It is up to us to give "voice" to a silent epidemic – dental and oral diseases.

As we move forward, the challenges are many on the technical front. There is urgent need to establish a viable surveillance system that tracks some of the basic international oral health indicators dealing with dental visits, teeth cleaning, complete tooth loss, fluoridation status, caries experience, untreated tooth decay, dental sealants and cancer of the oral cavity and pharynx.

There is also a lot more work to be done on the political front such as working with dental councils to regularize training, accreditation and licensing. This is especially important given the progress being made in our sub-region with the establishment of the Caribbean Single Market and Economy (CSME) and as we work with the CARICOM Secretariat, in seeking a special session with the Council of Human and Social Development (COHSOD) to highlight some of these pertinent issues. All hands must be on deck for us to succeed.

We greatly appreciate the support of the agencies and individuals who made the development of this long overdue document possible.

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# Introduction

*The Caribbean Atlantic Regional Dental Association (CARDA)* was conceptualized at a meeting of *the Caribbean Community (CARICOM) Ministers Responsible for Health* in 1974 in Nassau, Bahamas to establish a professional representation to and for all English speaking Caribbean countries. CARDA was inaugurated in 1976 in Saint Lucia and has well-defined constitutional mandates, which include:

- To promote the art and science of dentistry among its members.
- To co-operate with, inform, advise and assist all Governments in the Caribbean with regards to health care, dental education, dental standards and all matters pertaining to the dental profession.
- To promote the highest possible standard with reference to the dental profession in its member countries.
- To assist in the promotion of measures designed to improve the standard of health care delivery.

Presently, there is no cohesive Oral Health voice even though there is a definite need to implement regional oral health policy, with continued surveillance to provide data, which will allow evaluation of oral health services and permit the planning and implementation of programs according to the determined needs. It is felt that better service will be provided to the public if manpower resources are integrated and utilized fully through oral health personnel to achieve this objective.

Multisectoral resources can be integrated to improve prevention and promote oral health as a cultural norm. Financial resources will also have to be allocated to achieve this objective. It is noted that the percentage of national health budgets allocated to oral health is low and should be increased. An analysis of some of our national budgets show that the percentage of the health budget allocated to oral health in Barbados is 2.5% while Trinidad & Tobago is 0.7%. This information compares unfavorably with Germany 12%, Denmark 7.9%, France 7.6%, the Netherlands 5.8% and the United Kingdom 4.4%.

There is a need to include oral health professionals in the formulation of national and regional policies and to be continually trained in management skills and public health. Despite its inherent problems with interpretation, a dentist: population ratio of 1:2,500 is thought to be ideal by some international agencies, which are encouraging countries to achieve this goal. Although we recognize that the supply of oral health care providers is not adequate in this region, it is not possible to estimate an overall provider: population ratio due to national variations. The demand for services varies with personal needs and access to health care services.

CARDA met in Dominica in June 1995 to compile a ten (10) year oral health policy document. Major areas of concern identified included:

1. Oral Health Promotion and Disease Prevention
2. Caries and Periodontal disease
3. Oral Health Services
4. Human Resource Development
5. Oral Health Information Systems
6. Injuries (Trauma)

These concerns lead to the drafting of an Oral Health Policy for the Caribbean, a process started at the 1995 meeting through Working Groups. *The Pan American Health Organization* (PAHO) was mandated to convene a technical group to distill and disseminate a draft policy for the consideration at the 1997 CARDA meeting in Belize. After ratification, the final policy was to be presented to CARICOM Ministers Responsible for Health for their consideration.

The Caribbean Charter for Health Promotion<sup>1</sup> identifies six (6) strategies for general health promotion, which are applicable to the major areas of concern for oral health in the Caribbean. The strategies are:

- Formulating Healthy Public Policy
- Re-orienting Health Services
- Empowering Communities To Achieve Well Being
- Creating Supportive Environments
- Developing/Increasing Personal Health Skill
- Building Alliances With The Media

# I Oral Health Promotion and Disease Prevention

It is recognized that curative and rehabilitative strategies are not enough to address the oral health needs of a population. Greater emphasis must be placed on prevention and early detection of oral diseases through the promotion and protection of oral health care. Many medical conditions can be detected early through emphasis on primary oral health care. Many medical conditions can be detected early through regular examination of the oral cavity and the adoption of healthy lifestyles will facilitate not only general health, but also oral health. Measures such as prevention/cessation of smoking, proper nutrition, regular exercise and safe sex practices, impact directly and indirectly on oral health. Adequate resources must be provided to plan, implement and evaluate healthy lifestyle programs.

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## FORMULATING HEALTHY PUBLIC POLICY

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- Oral health promotion should be part of general health promotion to foster healthy lifestyles, including dietary guidelines.
- Health planning at central levels should include oral health care professionals.
- Budgetary allocation for health promotion, including oral health promotion, should be adequate in terms of human resources, materials and infrastructure for National and Regional programs.

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## RE-ORIENTATING HEALTH SERVICES

- Oral health should be recognized as a part of general health and it should be recognized that oral diseases are often a marker of general ill health.
- High-risk groups should be identified and screened as a part of their general health checks. For example, oral care should be integrated into routine visits for antenatal care, screening of pre-school children, diabetes checks, etc.
- Protocols should be established for oral examinations to assess the risk of oral diseases.
- Oral screening of patients should be more routine. All health professionals should be made more aware of the way in which oral health impacts on general health (and vice versa) and should be trained to recognize and detect early manifestations of oral disease. They should be encouraged to perform oral screening and where necessary, refer patients to oral health care professionals.
- Consideration should be given to the training of relevant personnel at different levels, where necessary, to address the oral health needs of the population.
- Oral health education should be based on up-to-date scientific evidence and should reflect the shift in orientation from a reparative approach to prevention of diseases and their consequences.
- There should be an equitable mix of public/private oral health care services, to ensure access by the majority of the population.

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CREATING SUPPORTING  
ENVIRONMENTS

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- School based oral health care services should be developed and/or strengthened by improved collaboration with parents and education services.
- Oral health promotion in various settings such as workplaces, churches, and community centers should be encouraged, perhaps through the training and employment of oral health educators or through raising the awareness and upgrading the skills of health educators, if necessary.
- The creation of smoke-free environments should be legislated and wherever possible, dental professionals should take an active part in smoking cessation programs<sup>11</sup>.

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EMPOWERING COMMUNITIES TO  
ACHIEVE WELL-BEING

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- Involvement of the community in the identification of oral health issues and in the planning, implementation and evaluation of interventions should be encouraged.
- The adoption of healthy lifestyle should be encouraged and enabled.

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DEVELOPING/INCREASING  
PERSONAL HEALTH SKILLS

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- Education, motivation and reinforcement of correct oral health practices through information and communication strategies as age appropriate, should be encouraged.
- Awareness of the risk factors and early signs of oral disease, self-examination and the importance of seeking appropriate advice, especially in older persons, should be encouraged.

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BUILDING ALLIANCES  
WITH THE MEDIA

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- Inter-sectoral planning for health, to include the areas of Agriculture, Education, Finance and other relevant sectors should be adopted.
- Partnerships as appropriate with the private sector, private groups, private voluntary organizations, service clubs, non-governmental organizations, and the media, should be established.

## 2 Caries and Periodontal Disease

In many countries, caries is an endemic disease, but it is largely preventable, being induced by refined sugars and which results in tooth decay. Studies done in Jamaica<sup>xii</sup> on the efficacy of fluoride use in the management of dental caries have shown that appropriate utilization of fluoride results in significant reduction in caries. Caries may be divided into Early Childhood Caries (ECC) and general caries. ECC (also known as Baby Bottle Caries) has significant negative impact on health and can result in extraction(s) under general anesthesia, causing added expense to the health care system and unnecessary risk to the young patients. Caries result in a significant increase in national economic costs due to absence from school and work as a result of pain and treatment. Costs and time away from school and work are also increased by the need to replace extracted teeth.

The W.H.O. target was 3 or less Decayed, Missing or Filled Teeth (DMFT) at 12 years of age by the year 2000<sup>iii</sup>. There are great discrepancies throughout the region. The D.M.F.T. at 12 years of age in Montserrat is 9.5 compared with 0.2 in Bermuda<sup>iv</sup>, 0.84 in Barbados<sup>v</sup> and 4.9 in Trinidad & Tobago<sup>vi</sup>. There is a regional variation in caries prevalence among 12 year olds, with 2% in Bermuda<sup>iv</sup>, 38% in Antigua<sup>vii</sup>, 95% in Belize<sup>iii</sup>, and 37% in Barbados<sup>v</sup>. The 1989 study in Antigua also examined the prevalence of ECC in children aged 3–4 years and showed a decayed, extracted and filled (DEFT) prevalence of 4.6, affecting primary teeth in that population<sup>vii</sup>. A Barbados study showed a DEFT of 3.2 at 3 years of age<sup>vii</sup> and survey of ECC in Anguilla reported a prevalence of 37% in children aged 24–71 months with most decay in the primary molar<sup>vi</sup>.

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### FORMULATING HEALTHY PUBLIC POLICY

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- Policies with legislative support should be formulated and implemented so that evidence based preventive care is established and maintained. These include adequate, monitored topical and systemic intake of fluoride, application of pit and fissure sealants and effective oral hygiene.
- Determination of water fluoride levels should be done in all countries as previously stated in the report of the 1992 Meeting of Ministers Responsible for Health<sup>x</sup>.
- Baseline studies to determine fluoride consumption should be done in all countries prior to implementation of any fluoridation programs<sup>xi</sup>.
- Initial oral screening in early childhood (pre-school) stage.
- Dental examinations should be a requirement for entry into primary and secondary schools, with referral for care where appropriate.
- An on-ongoing oral health care surveillance system<sup>xiii</sup> should be established using various data sources that are collected regularly, so that trends can be quickly recognized, planning instituted, implemented, and evaluated on a timely basis.



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#### RE-ORIENTING HEALTH SERVICES

- For ECC, Maternal and Child Health programs, which support breast-feeding and well-baby clinics, should emphasize caries prevention.
- Standardized data surveillance should be instituted, especially to determine risk behaviors for the development of ECC in the Caribbean.
- Ongoing education programs on caries prevention should be conducted in multiple settings such as health centers, hospitals and through support for special events such as Dental Health Week/Month.
- Training in the use of the Atraumatic Restorative Technique (ART) for Dental Professionals working in public health services should be made available.

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#### CREATING SUPPORTIVE ENVIRONMENTS

- The primary health care approach should be adopted where applicable in different settings such as workplaces, schools and churches to ensure inter-sectoral collaboration.
- Programs in schools to improve oral health should be created and maintained with inclusion of oral health in the curriculum and promotion of fluoride toothpaste. Parental supervision of toothbrushing technique and fluoride use by children under 6 years-old, with the application of a pea size amount of paste to prevent excessive ingestion of fluoride.

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#### EMPOWERING COMMUNITIES TO ACHIEVE WELL-BEING

- Community education, information and other health promotion strategies should be implemented as socially and culturally acceptable, to include provision of healthier food choices.

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#### DEVELOPING/INCREASING PERSONAL HEALTH SKILLS

- One to one instruction in tooth brushing dentifrices with fluoride should be established for children at the start of the school term and for adults by general and oral health practitioners with subsequent monitoring.

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#### BUILDING ALLIANCES WITH THE MEDIA

- Collaboration with appropriate non-governmental organizations (NGO's), corporate business houses (especially toothpaste companies) and media should be effected in caries prevention and periodontal disease prevention. Their assistance should be elicited in framing their messages to coincide with evidencebased dentistry.

### 3 Oral Health Services

Oral health services in the Caribbean are currently experiencing several problems, which include inequitable access to care, inadequate maintenance of equipment, inadequate budget allocation in the public sector, lack of cohesive functioning of oral health care personnel, inadequate protocols for oral health care and inadequate non-standardized methods of surveillance, monitoring and evaluation.

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#### RE-ORIENTING HEALTH SERVICES

- Oral health care should be fully integrated in comprehensive health care delivery.
- Allocation of resources to oral health should be improved, based on identified needs, goals and objectives.
- Dental Councils facilitated by CARDA, should evaluate and ensure appropriate standards of dental education for all oral health personnel. This could include undergraduate, postgraduate and continuing dental education for dentists and refresher/advanced training for auxiliary personnel both at the local and regional level.
- More effective deployment of trained dentists and auxiliary dental personnel in both the public and private sectors to ensure equity of access to appropriate treatment should be established.
- Systems should be developed to allow the introduction of mandatory continuing education credits. This would involve increasing the availability of continuing dental education courses in the region (e.g. U.W.I. – Dental School, Trinidad; Dental Auxiliary School – Jamaica) and monitoring their standards.
- Infrastructure to allow the equitable distribution of oral health care services, especially in areas of greatest need should be in place.
- Universal Infection Control procedures should be in place and continually monitored in all oral health care practices, public and private.
- Local levies (duties) on equipment and materials for the provision of oral health care services should be reduced or removed, thereby increasing service availability.
- National/regional training in dental equipment servicing should be encouraged, as an effective means of increasing the utilization of costly dental equipment and thereby reducing replacement costs.
- Access to care for people with special needs should be ensured for parity of dental services for persons who are physically and/or mentally challenged and persons who are institutionalized due to age or medical disabilities. Non-Governmental Organizations and their programs (e.g. Special Olympics) can be most beneficial in raising the awareness of these needs for the care-takers and all of the providers of health care.

## 4 Human Resource Development

Human resources in oral health are not as effective as they should be in serving the needs of the population, as evident from the above sections. There are inadequate numbers of certain categories of oral health care personnel in some countries; some are inadequately trained; management and public health training are required for senior administrative personnel; continuing education is needed for all categories of oral health care personnel; opportunities for upward mobility of auxiliary dental personnel are limited; remuneration is often inadequate in the public sector; and legislation governing the practice of non-qualified personnel is either non-existent or often not enforced.

There is no regional review process for the curricula of regional institutions involved in oral health training. The establishment of a regional advisory board, or similar body, to plan and review training in oral health is essential for the future of oral health care in the Caribbean.

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### FORMULATING HEALTHY POLICY

- Provision should be made within the local budget(s) to allow for a regular forum for the Heads of Dental Services, to interact and discuss oral health issues and to inform their local Ministries of regional policy decisions.
- Training in management should be provided (preferably a prerequisite) for *the Heads of Dental Services*.
- Recognition, input and placement for *the Head of Dental Services*, within the organizational structure of *the Ministries of Health* should be on par with those of *the Chief Medical Officer*.
- Governments should establish a regional advisory body, involving national dental councils, to facilitate their acceptance of persons trained in oral health throughout the region. The organization and function of the advisory body needs to be clearly defined and supported by the local *Ministries of Health*.

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### RE-ORIENTING HEALTH SERVICES

- Types of specialties needed to fill gaps in oral health services should be identified and training of persons supported, as indicated.
- Training and development of all categories of staff, including auxiliary personnel, should be encouraged and implemented with the application of performance standards and appraisals.
- Numbers and categories of oral health care providers needed and relevant training programs should be identified based on individual country needs, with provision of contractual obligations and job descriptions.

## 5 Oral Health Information Systems

Currently, most countries' main focus is on the presence of oral disease and lack of substantiated background information on oral health conditions. This information is variable throughout the region. Caries prevalence has only been determined in some countries and there is need to investigate the social and cultural influences related to early childhood caries. The extent of periodontal disease and the actual incidence of oral cancers and traumatic dental injuries in this sub-region are not known.

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### RE-ORIENTING HEALTH SYSTEMS

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- Standardized oral health information systems for the collection of relevant baseline data, including data on epidemiology, human resource distribution, quality of care and other data as appropriate, should be established.
- The dissemination of oral health information to policy planners and decision-makers in *Ministries of Health*; to oral health and other allied health professionals; and to the general public should be improved using communication strategies as appropriate for the respective audience.

## 6 Injuries (Trauma)

It is recognized that trauma is not isolated to the facial region and it is acknowledged that there is a need for a team approach to include other health care professionals and the institutions of a data surveillance system to determine the extent and etiology of all facial injuries. As in other areas, the data may then be analyzed and used to help governments plan policies and programs.

Injuries (Trauma), intended and unintended, may be considered under the following categories:

- a) Violence (domestic and others)
- b) Motor Vehicle Accidents (MVA)
- c) Occupational (Workplace)
- d) Sports

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### FORMULATING HEALTHY PUBLIC POLICY

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- Legislation governing each category should be reviewed as necessary and enforced. Such review should take into consideration the fact that drug and alcohol abuse play a major role in the etiology of all categories.
- Enforcement should cover the use of seat-belts and helmets to prevent injuries in motor vehicle accidents and compliance with the Highway Code through adequate policing.
- In sports, policies governing the use of mouth, facial and head protection where applicable, should be formulated and enforced.

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### RE-ORIENTING HEALTH SERVICES

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- Services to manage dental/facial trauma injuries should be available and accessible through the establishment of specialized centers in selected countries, where Maxillo-Facial and/or teaching institutions are already in place.
- When developing clinical protocols for trauma patients, there should be reference to international guidelines to allow for appropriate and effective management of such cases.
- Health care professionals should be made aware of the factors that contribute to the various categories and their duties and responsibilities in the management of both the injury and the underlying factors.

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### CREATING SUPPORTIVE ENVIRONMENTS

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- Conflict resolution strategies and techniques should be introduced into schools' curricula from the primary school level.
- An Accident Plan should be established in all institutions (e.g. schools, workplaces) detailing roles, responsibilities and procedures to be followed in the event of an emergency, including referral to an immediate primary care facility.

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### EMPOWERING COMMUNITIES TO ACHIEVE WELL-BEING

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- The development of support groups and use of existing ones should be encouraged to deal with victim's rights, to offer counseling aid and to provide social support (e.g. Alcoholics Anonymous).

- Community education and information on factors related to injury and its prevention should be provided as appropriate for the social and cultural environment.

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DEVELOPING/INCREASING  
PERSONAL HEALTH SKILLS

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- Information, education and communication on injury prevention for all categories should be provided using various strategies and media to encourage changes in attitude and behavior as well as to provide knowledge.

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BUILDING ALLIANCES  
WITH THE MEDIA

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- Collaboration with appropriate non-governmental organizations (NGO's) and the media in the planning, implementation and evaluation of programs should be effected whenever possible.
- Medical specialties, such as plastic surgery, ear, nose and throat and neurosurgery, should liaise with the appropriate oral health providers in the management of injuries and provide data to permit surveillance and prevention.
- Occupational health and safety programs should be implemented and evaluated in all institutions as a standardization measure.
- Sporting bodies should be involved in the planning, implementation and evaluation of sports programs and education on injury prevention should be provided as an integral part of coaching. Rule (regulation) changes may be necessary to require face and head protection.

# Oral Health Goals for the Caribbean

The following are oral health issues highlighted within the context of Family Health:

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## STRATEGIC GOAL 1

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- Oral health of all children, people with disabilities and the elderly improved.

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### INDICATOR

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- Between 2005–2012, the DMFT, Periodontal disease, Trauma and Fluorosis levels of children, people with disabilities and people over 65 years reduced by 50%.

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## STRATEGIC GOAL 2

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- Oral health policy finalized and implemented.

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### INDICATORS

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- Between 2005–2008, legislative framework to address in relation to continuous education in dentistry developed.
- Between 2005–2008, policies for infection control in dental practice developed and improved.
- Between 2005–2008, continuous Quality Improvement, monitoring and evaluation system established.
- Between 2005–2012, policy to provide all women attending antenatal services with oral health care and oral health education developed and implemented.

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## STRATEGIC GOAL 3

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National oral health programs strengthened.

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### INDICATORS

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- Between 2005–2008, rapid assessment (screening) programs in all schools introduced and implemented.
- Between 2005–2008, comprehensive oral health programs for children, people with disabilities and the elderly developed.
- Between 2005–2008, Oral and Maxillo-Facial services established.

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## STRATEGIC GOAL 4

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Improved information systems network for national surveillance of the oral health situation.

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### INDICATOR

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Between 2005–2012, establish and implement an Oral Health reporting and feedback system involving both public and private sector providers.

# Conclusion

It is imperative that *Heads of Dental Services* be able to access modern information technology, conduct standardized epidemiological studies and meet regularly to allow for the planning, implementation and assessment of national and regional oral health programs.

This document has described oral health issues affecting Caribbean people that require attention at national and regional level and has outlined a framework for action. The oral health policy and recommendations presented need to be taken forward by *the Heads of Dental Services* and CARDA. It also becomes incumbent upon *Ministers for Health* in their respective islands to ratify this document and enable its implementation across the region.



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