

The Irish Expert Body on Fluorides and Health  
An Corpán Oilte Éireannach um Fluairídí agus Sláinte

# Action Plan 2005

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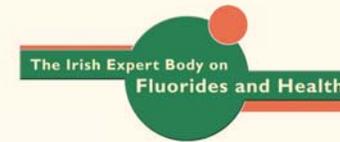
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An Corpán Oilte Éireannach um Fluairídí agus Sláinte

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Fluoride crystal magnified  
Photo: National Institutes of Health

Source: "Dental Science for Dental Health"  
National Institutes of Dental Research  
National Museum of American History  
Smithsonian Institution, 1988



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## Action Plan

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## Foreword

I welcome the publication of this Action Plan which has given the Irish Expert Body on Fluorides and Health the opportunity to focus on overseeing the implementation of the recommendations of the Forum on Fluoridation.

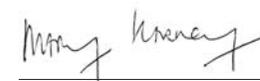
The Expert Body has a broad representation from areas including the environment, dentistry, health promotion, food safety, biochemistry and the public, and is fully supported by the Dental Health Foundation as secretariat.

I understand that the evidence to date demonstrates that water fluoridation has been very effective in improving oral health and has made a significant contribution to the reduction in dental caries of the Irish population. The safety and effectiveness of water fluoridation has been endorsed by a number of international and reputable bodies such as the World Health Organisation, the United States Public Health Service and the United States Surgeon General. The World Health Organisation has stated that "people of all ages, including the elderly, benefit from community water fluoridation".

It is recognised that ongoing quality assurance of all aspects of the water fluoridation process must be maintained. The Expert Body will advise the Minister on all aspects of fluoride going forward; in particular, ongoing research related to fluoride will continue to be evaluated and expanded to deal with new and emerging issues.

This Action Plan outlines an ambitious programme and I am confident that the recommendations that have been set out can be managed and progressed successfully.

Finally, I would like to take this opportunity to thank everyone involved for their contribution to the preparation of this Plan.



**Mary Harney TD**  
Tánaiste and Minister for Health and Children



Dr Seamus O'Hickey	Chairman
<b>MEMBER</b>	<b>AREA OF EXPERTISE</b>
Dr Brian P O'Herlihy	Public Health Medicine (Vice - Chair)
Professor John Clarkson	Dentistry
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Mr Denis Lyons	Ministerial Nominee
Mr Oliver Fogarty (until 31st December 2004) Mr Luke Varley (from 1st January 2005)	Department of Environment, Heritage & Local Government - Water Services Inspectorate
Mr Enda Falvey (until 26th April 2005) Mr Colm Keenan (from 27th April 2005)	Department of Environment, Heritage & Local Government - Water Services Section
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Ms Martina Queally	Health Promotion, Health Service Executive
Mr Darragh Page	Environmental Protection
Mr Ray Parle	Environmental Health
Ms Ursula O'Dwyer	Diet and Nutrition
Ms Biddy O'Neill	Health Promotion, Department of Health & Children
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Professor William Binchy	Law/Ethics
Ms Dorothy Gallagher	Public

**Secretariat:** Deirdre Sadler – Director; Patricia Gilsenan-O'Neill – Administrator  
Tom Rogers – Knowledge & Communications; Etain Kett – Quality Assurance

## Chairman's Introduction

I am delighted to present this Action Plan of the Irish Expert Body on Fluorides and Health. The purpose of this plan is to give effect to the work of the Expert Body in fulfilling its terms of reference, namely:

- To oversee the implementation of the Recommendations of the Forum on Fluoridation.
- To advise the Minister and evaluate ongoing research – including new emerging issues – on all aspects of fluoride, its delivery methods as an established technology and as required.
- To report to the Minister on matters of concern at his/her request or on own initiative.

The Expert Body's highest priority is to ensure the implementation of the recommendations of the Forum on Fluoridation. The Expert Body has identified 'the lowering of the fluoride level in drinking water to a range of 0.6 to 0.8ppm, with a target of 0.7ppm', as its first priority.

A strategic framework has been developed to aid and direct the Expert Body in identifying and implementing the necessary measures proposed by the Forum's recommendations, as well as ensuring that the systems employed are sound, transparent, and meet the highest standards of Quality Assurance and Accountability.

The Action Plan's successful implementation is reliant on the many stakeholders who are involved in the different aspects of the use of fluorides, in particular, its delivery methods as an established health technology.

The website of The Irish Expert Body on Fluorides and Health, [www.fluoridesandhealth.ie](http://www.fluoridesandhealth.ie), will provide ongoing information on the work and progress of this Action Plan's implementation, including information on fluorides and health, and fluoridation in general.

Finally, I would like to acknowledge the important work of the Dental Health Foundation in fulfilment of its secretariat role to the Expert Body.



**Dr. Seamus O'Hickey**  
Chairman



## Section 1

### Terms of Reference of the Irish Expert Body on Fluorides and Health:

- To oversee the implementation of the Recommendations of the Forum on Fluoridation.
- To advise the Minister and evaluate ongoing research - including new emerging issues - on all aspects of fluoride, its delivery methods as an established health technology and as required.
- To report to the Minister on matters of concern at his/her request or on own initiative.

### Strategic Framework

The eight separate sets of recommendations included in the Forum on Fluoridation's Report clearly state the strategic framework within which the Expert Body's proposed Action Plan must be further developed.

The individual recommendations contained in each of the subsets provide the analytical framework for the creation of a naturally reinforcing and complementary grid of actions designed: to strike an appropriate balance between the benefits of water fluoridation in terms of improved oral health and the risk of dental fluorosis.

## Section 2

### Recommendations and Key Performance Indicators

The detailed implementation actions supporting the recommendations of the Forum Report will require further input and discussion with the members of the Expert Body. Outlined in Section 3 (pages 8 to 23) are the indicative strategic actions which will be needed to give effect to the recommendations. The strategic actions are currently being developed in conjunction with the Expert Body. Key outcomes for each of the recommendations will need to be produced.



## Section 3

### Recommendation 1: Policy Aspects of Water Fluoridation

#### Strategic Objective 1

- 1.1 The fluoridation of piped public water supplies should continue as a public health measure, subject to the other recommendations contained in this report.
- 1.2 In the light of the best available scientific evidence, the Fluoridation of Water Supplies Regulations, 1965 should be amended to redefine the optimal level of fluoride in drinking water from the present level (0.8 to 1.0 ppm) to between 0.6 and 0.8 ppm, with a target value of 0.7 ppm.
- 1.3 The amended Regulations should reflect advances in the technology of fluoride monitoring and testing and also the most recent international specifications for the quality of the materials used in the fluoridation process.
- 1.4 Implement the recommendations of the Forum and advise the Minister for Health and Children on an ongoing basis on all aspects of fluoride and its delivery methods as an established health technology.

### Recommendation 1: Policy Aspects of Water Fluoridation

#### Specific Actions will include

- 1.1.1 • Proposals will be put forward to ensure the implementation of the other recommendations of the Forum Report.
- 1.2.2 • A review of the Fluoridation of Water Supplies Legislation and other relevant drinking water legislation will be undertaken to identify any necessary amendments.
  - These proposed amendments will be notified to the Minister.
- 1.3.3 • Carry out a review of international best practice in fluoridation technology.
  - A set of appropriate specifications and national standard for the industry will be proposed to the Minister for consideration.
- 1.4.4 • A proposal will be put forward which ensures that fluoride and its associated delivery methods remain integral elements of public health in Ireland.



## Section 3

### Recommendation 2: Technical Aspects of Water Fluoridation

#### Strategic Objective 2

- 2.1 Guidelines/codes of practice and audit processes should be developed to support ongoing quality assurance of all aspects of the water fluoridation process and should take account of results of both Irish and international research.
- 2.2 External audit procedures of existing fluoridation plants should be put in place to monitor the performance of existing plants and should be part of the specification of new plants. Audit results should be included in annual reports on water fluoridation produced by relevant fluoride monitoring committees.
- 2.3 The standards and quality of each fluoridation plant should be assessed and decisions made as to the appropriateness of the continued use of inefficient plants.
- 2.4 Fluoride monitoring and analytical and reporting procedures should be updated to reflect modern technologies and to facilitate timely reporting of all drinking water fluoride levels. These results should be made available in an appropriate format so that compliance with regulations can be monitored. The results should be freely available for public scrutiny.
- 2.5 Raw water should be checked for fluoride levels before fluoridation takes place, in compliance with the current Regulations.
- 2.6 The Health Service Executive which is responsible for purchasing the fluoridating products on behalf of the country's health services, should ensure compliance with the amended Regulations specifying the quality standards of the products used in the fluoridation process.

### Recommendation 2: Technical Aspects of Water Fluoridation

#### Specific Actions will include

- 2.1.1 • Ensure that international best practice informs the guidelines/codes of practices and processes.
  - Develop quality assurance processes and procedures.
  - Drive the acceptance by the industry of these procedures.
- 2.2.2 • External auditing procedures will be developed for the industry in Ireland.
  - New Industry Audit Standards will be put in place.
  - The appropriate authorities will be tasked with completion of an introductory and annual audit process.
  - Data from these audits will be published in an annual report.
  - Review of function of existing plants should be undertaken for the purposes of their efficient performance.
- 2.3.3 • New industry standards will be developed in conjunction with the key industry stakeholders such as the Fluoridation Monitoring Committees; the Public Analyst Laboratories and other relevant public bodies and government Departments.
  - The New Standards will be proposed for implementation.
  - An overall assessment methodology for gathering the relevant data from the various monitoring committees and plant operators will be put in place.
- 2.4.4 • The existing monitoring and reporting procedures will be identified and assessed for ongoing effectiveness.
  - Update procedures will be put in place.
  - An appropriate reporting system on drinking water fluoride levels will be put in place.
  - The feasibility of publishing a results table on the website of The Irish Expert Body on Fluorides and Health will be considered.
- 2.5.5 • A system will be recommended for implementation which will provide certifiable proof that this checking is being carried out in accordance with the regulations.
- 2.6.6 • The Expert Body will put in place a review mechanism with the Health Service Executive whereby it can assure that attention to this critical issue is apparent and compliance is in place.

## Section 3

### Recommendation 3: Fluoride Toothpaste

#### Strategic Objective 3

- 3.1 • The Forum recommends the continued use of fluoride toothpaste in fluoridated and non-fluoridated areas because of the additive benefit from the combination of fluoridated water and fluoride toothpaste.
- 3.2 • Parents should be advised not to use toothpaste when brushing their children's teeth until the age of 2 years. Prior to this age parents can brush their children's teeth with a toothbrush and tap water. Professional advice on the use of fluoride toothpaste should be sought where a child below 2 years of age is considered to be at high risk of developing dental decay.
- 3.3 • Parents should supervise children aged 2 to 7 years when brushing their teeth and should ensure that only a small, pea-sized amount of fluoride toothpaste is used and that swallowing of the paste is avoided.
- 3.4 • Paediatric toothpastes with low concentrations of fluoride require further research before their use can be recommended.
- 3.5 • Guidelines for the use of oral health care products in childhood should be developed for use by all involved in advising members of the public on health care matters. The Expert Body will play a key role in the development of these guidelines.

### Recommendation 3: Fluoride Toothpaste

#### Specific Actions will include

- 3.1.1 • Appropriate methods will be employed to assess the continued use of fluoride toothpaste in both fluoridated and non fluoridated water supply areas.
- 3.2.2 • A campaign of education in the appropriate use of fluoride toothpaste in young children up to 7 years will be developed in collaboration with all appropriate stakeholders.
- 3.3.3 • A campaign of education for parents in appropriate oral health procedures and use of fluoride toothpaste for children will be developed in collaboration with all appropriate stakeholders.
- 3.4.4 • Ongoing monitoring of the evidence base will be carried out to assess and make recommendations on the value of paediatric toothpastes with low concentrations of fluoride.
- 3.5.5 • Review best practice international guidelines
  - Develop Oral Health Care Products Guidelines in collaboration with all appropriate stakeholders.



## Section 3

### Recommendation 4: Oral Health Care Industry

#### Strategic Objective 4

- 4.1 • Labelling of fluoride products in a manner which is better understood by the general population and especially by those with low levels of literacy or visual impairment.
- 4.2 • The use of clear and understandable instructions on all fluoride product labels, in particular symbols/pictures to describe the appropriate amount of toothpaste to be used by children.
- 4.3 • The provision of child resistant containers for mouth rinses and fluoride supplements to prevent inappropriate ingestion of these products by children.

### Recommendation 4: Oral Health Care Industry

#### Specific Actions will include

- 4.1.1 • Investigate and assess data supporting best international practice in fluoride and associated products labelling.
  - Engage, organise and facilitate an industry workshop to develop understanding of, and procedures for, better labelling of products.
  - Develop and communicate national labelling guidelines for new product introduction.
- 4.2.2 • Review the national perception on appropriate level of fluoride toothpaste that should be used.
  - Develop with the industry and publish a clear pallet of symbols to be used.
  - Develop and communicate to the public, information on the new symbols being used and on usage behaviour.
- 4.3.3 • An industry forum will be arranged to review new child resistant containers in use in other product areas.
  - Appropriate action will be proposed to ensure use of appropriate products in this area.



## Section 3

### Recommendation 5: Infant Formula

#### Strategic Objective 5

- 5.1 • Infant formula should continue to be reconstituted with boiled tap water in accordance with manufacturers' instructions. Alternatively, ready-to-feed formula can be used.
- 5.2 • The use of bottled water to reconstitute infant formula is not recommended unless the labelling indicates its suitability for such use.

### Recommendation 5: Infant Formula

#### Specific Actions will include

- 5.1.1 • A consultation process with the parties involved in the manufacturing of products and with health care professionals will be undertaken.
- An education programme for parents of babies and toddlers will be developed and implemented to support the use of boiled water in reconstituting infant formula. This is to include the involvement of the range of stakeholders concerned with maternal and child health care matters.
  - Support the promotion of breast feeding as the optimal infant feeding process.
  - Conduct research into the available fluoride content of ready-to-feed liquid formula available in Ireland and advise on appropriate safe use and provision of information to consumers.
  - Conduct research into the mineral composition of bottled waters available in Ireland and make appropriate recommendations for its safe use in the reconstitution of powdered infant formula and the provision of information to consumers.
- 5.2.2 • As a part of the education programme for parents of babies and toddlers potential dangers with the use of bottled water will be identified and communicated. This is to include the involvement of the range of stakeholders concerned with maternal and child health care and well-being matters.



## Section 3

### Recommendation 6: Fluoride Research

#### Strategic Objective 6

- 6.1 • All future research undertaken should be consistent with the research philosophy as outlined in the Health Research Strategy.
- 6.2 • The Expert Body should prioritise designated research in areas relevant to fluoride, and appropriate funding should be made available.
- 6.3 • Ongoing research related to fluoride should continue to be evaluated by the Expert Body and expanded to deal with new emerging issues.
- 6.4 • Research related to fluoride should include the collection of relevant data on general health.
- 6.5 • In view of the acknowledged importance on a worldwide basis of research in the area of fluoride and oral health, research programmes currently in place should continue and be further developed to augment the world body of information on fluoride for the benefit of all.
- 6.6 • The current 10-year cycle of adult and child dental health surveys should continue. In addition, a rolling programme of oral health surveys every second year for a selected age group of children should be implemented.

### Recommendation 6: Fluoride Research

#### Specific Actions will include

- 6.1.1 • Develop from the Health Research Strategy (2001) a set of guidelines and ensure that all research initiated by the Irish Expert Body on Fluorides and Health is carried out using this methodology.
- 6.2.2 • A list of key research projects may be developed and proposed to the Expert Body for approval.
  - This approved list may be reviewed with the Health Research Board.
  - Funding for this research may be sought from the appropriate bodies.
- 6.3.3 • Current research findings will be provided to the Expert Body regularly. The Body will:-
  - \* Review current research findings
  - \* Identify trends and emerging issues
  - \* Identify new thinking on emerging issues
- 6.4.4 • The Expert Body will liaise with other relevant health institutions and bodies at national and international level, including the WHO, to ensure awareness of the need for inclusion of relevant data gathering on oral health in their research projects and the relevance of oral health matters.
- 6.5.5 • The Expert Body will create, in conjunction with the Health and Information Quality Authority (HIQA), a joint forum with the appropriate health research authorities to ensure that these research initiatives are maintained and that research is disseminated throughout the sector.
- 6.6.6 • Studies to evaluate the effectiveness of Water Fluoridation should continue on a regular basis.

## Section 3

### Recommendation 7: Education, Information and Public Participation

#### Strategic Objective 7

- 7.1 Media analysis and discussion in both the national and regional press to ensure widespread dissemination of the findings of the Forum on Fluoridation.
- 7.2 Further information from the Forum on Fluoridation (2002) Report itself, and from the Forum's website, [www.fluoridationforum.ie](http://www.fluoridationforum.ie)
- 7.3 National and local radio and television coverage to add to this information flow.
- 7.4 Short video presentation of the main issues, accompanied by explanatory leaflets, made available to schools and local libraries, for example.
- 7.5 Regional public meetings with a panel of multidisciplinary experts available to present information and to respond to questions and concerns expressed by the general public or by any special interest group. Such meetings could be convened at the request of local interest groups, for example local authorities, community groups or consumer organisations.
- 7.6 Following completion of this exercise it is recommended that surveys or other methods be undertaken to measure the public response to the findings and recommendations of the Forum to help inform policy makers and legislators about public attitudes to water fluoridation.

### Recommendation 7: Education, Information and Public Participation

#### Specific Actions will include

- 7.1.1 • A communications strategy will be put in place to raise public awareness of the Recommendations of the Forum and the work of the Expert Body.
- 7.2.2 • An ongoing programme of education and information will be proposed.
  - An informative and user friendly website, [www.fluoridesandhealth.ie](http://www.fluoridesandhealth.ie), has been put in place.
- 7.3.3 • Consideration of National and Local media will be included in the communications strategy.
- 7.4.4 • The feasibility of a video presentation and explanatory leaflets for education purposes will be considered.
- 7.5.5 • Methods of increasing regional awareness will be considered in the formulation of the communications strategy.
- 7.6.6 • Public awareness research will be undertaken as appropriate and will form part of the Expert Body's overall communications strategy.

## Section 3

### Recommendation 8: Public Health and Professional Practice

#### Strategic Objective 8

8.1\* Oral health as an integral part of general health should be included in the overall provision of health care and in the design of health promotion programmes and initiatives.

\* See Appendix A (i) and (ii).

### Recommendation 8: Public Health and Professional Practice

#### Specific Actions will include

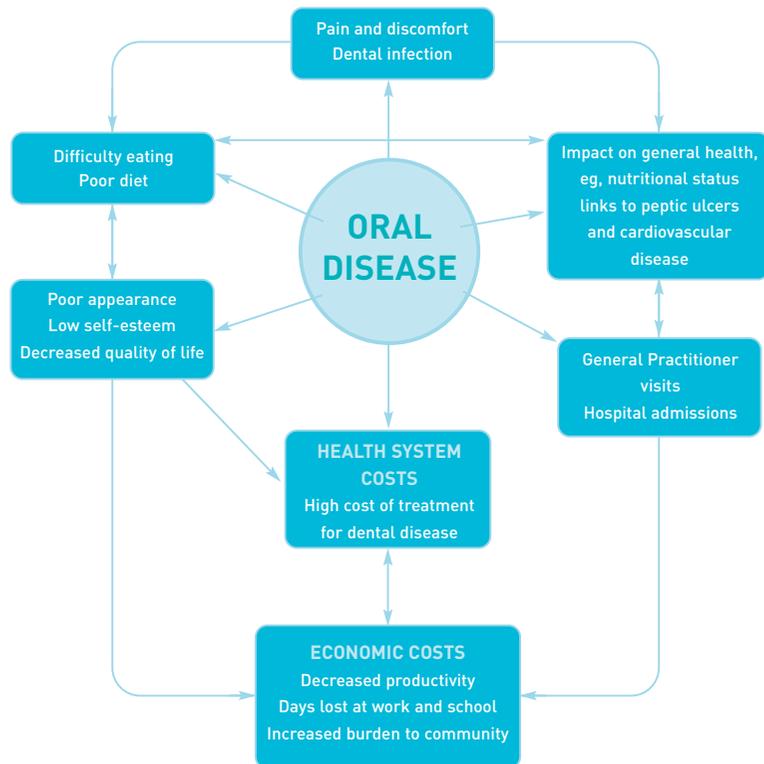
8.1.1\* • The Expert Body will contribute to the planning of emerging public health policies, and the implementation of existing policies, which identify oral health as an integral part of the general health and well being of the population.

\* See Appendix B.



## Appendix A (i)

### Impact of Oral Disease



Source: Promoting Oral Health 2000-2004: Strategic Directions and Framework for Action, Health Development Section, Public Health Division, Department of Human Services, December 1999, Melbourne, Victoria

## Appendix A (ii)

Health has been defined by the World Health Organisation as:

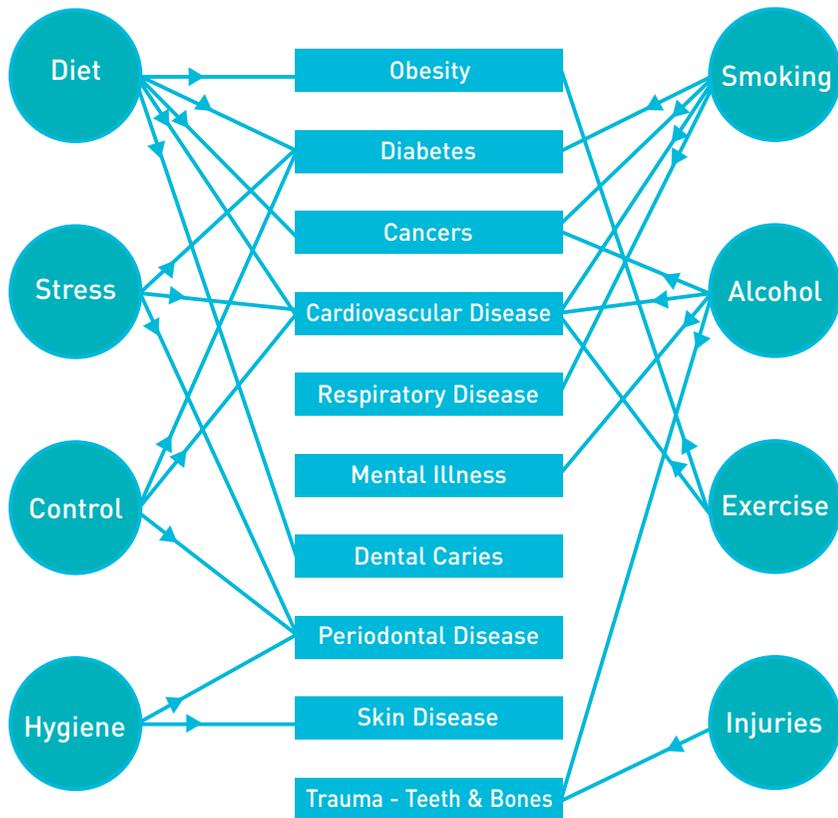
“A complete state of physical, mental and social well-being and not merely the absence of disease or infirmity”.

Oral Health has been defined by the Health Education Authority, (London) as:

“A standard of health of the oral and related tissues which enables an individual to eat, speak and socialise without active disease, discomfort and embarrassment and which contributes to general well-being”.

## Appendix B

### Common Risk Factors for General and Oral Health



## Notes

Sheiham, A., Watt, R.G. 'The common risk factor approach; a rational approach for promoting oral health'. Community Dentistry and Oral Epidemiology, 2000.