



# NFIS

**National Fluoridation  
Information Service**

c/ Regional Public Health  
Private Bag 31907  
Lower Hutt 5040  
04 570 9002  
nfis@huttvalleydhd.org.nz  
www.nfis.org.nz

**NFIS Consortium Partners:**  
Regional Public Health  
Hutt Valley District Health Board  
Massey University Wellington  
Environmental Science & Research  
NZ National Poisons Centre

# Evaluation Plan

for the National Fluoridation  
Information Service (NFIS)



**Project Name:**

National Fluoridation Information Service

**Consortium Partners:**

Regional Public Health (RPH), (Lead)

HVDHB Community Dental Service

Environmental Science and Research (ESR)

Centre for Public Health Research, Massey University (CPHR)

National Poisons Centre (NPC)

**Project description:**

Regional Public Health will lead the consortium to deliver the National Fluoridation Information Service. NFIS is an information and advisory service which will support DHBs and TLAs by providing robust and independent scientific and technical information, advice and critical commentary around water fluoridation.

## TABLE OF CONTENTS

|   |           |
|---|-----------|
| <b>1.0 Background</b> .....                               | <b>3</b>  |
| 1.1 National Fluoridation Information Service (NFIS)..... | 3         |
| 1.2 Purpose and Objectives .....                          | 4         |
| <b>2.0 Evaluation of NFIS</b> .....                       | <b>5</b>  |
| 2.1 Background .....                                      | 5         |
| 2.2 Formative Evaluation .....                            | 6         |
| 2.3 Process Evaluation .....                              | 6         |
| 2.4 Impact Evaluation .....                               | 7         |
| <b>3.0 Evaluation methods</b> .....                       | <b>9</b>  |
| <b>4.0 Stakeholders</b> .....                             | <b>9</b>  |
| <b>5.0 Risks</b> .....                                    | <b>10</b> |
| <b>6.0 Implementation Timeline</b> .....                  | <b>11</b> |
| References .....  | 11        |

### Tables:

|   |    |
|---|----|
| 1. Tentative Process Evaluation Questions and Sources of Data .....           | 7  |
| 2. Tentative Impact Evaluation Questions and Sources of Data .....            | 8  |
| 3. Tentative List of Stakeholders for the Evaluation Activities for the NFIS. | 9  |
| 4. Risks and Mitigation Strategies.....                                       | 10 |

### Figures:

|   |   |
|---|---|
| 1. Visual presentation showing the link between Service Objectives and desired Outcomes ..... | 5 |
| 2. Proposed Outputs in relation to the Project Objectives .....                               | 6 |
| 3. Intermediate Outcomes upon which the Impact Evaluation of the Project will be based .....  | 8 |

## ACRONYMS

|       |   |   |
|-------|---|---|
| DHBs  | - | District Health Boards                            |
| HVDHB | - | Hutt Valley District Health Board                 |
| HIIRC | - | Health Improvement and Innovation Resource Centre |
| MOH   | - | Ministry of Health                                |
| NFIS  | - | National Fluoridation Information Service         |
| PHU   | - | Public Health Unit                                |
| RPH   | - | Regional Public Health                            |
| SQI   | - | Surveillance, Quality and Intelligence            |
| CL&IG | - | Clinical Leadership & Intelligence Group          |
| TLAs  | - | Territorial Local Authorities                     |

## 1.0 BACKGROUND

### 1.1 National Fluoridation Information Service (NFIS)

The oral health status of New Zealand is variable. Good Oral Health for All, for Life; The Strategic Vision for Oral Health In New Zealand (2006) notes that:

*“The most dramatic and consistent inequities in oral health status are those between children in fluoridated and non-fluoridated areas. Key to supporting an environment that supports good oral health is promoting the use of fluoride. The Ministry’s current policy recommends water fluoridation at 0.7 to 1.0 milligrams per litre of drinking water.”*

The Ministry of Health ('the Ministry') recommends water fluoridation where technically feasible as a safe and effective means of improving oral health. In 2010 approximately 50% of the total New Zealand population has access to reticulated water supplies that are fluoridated.

Under current legislation, local councils hold the mandate whether to fluoridate their area’s water supplies, while DHBs are responsible for protecting the health of their population. DHBs must meet the requirements for water fluoridation as stated in the Service Specification for Public Health. These are to:

1. Provide advice on the benefits of water fluoridation when the issue becomes a significant issue in the community; and
2. Assist and work with Māori and other ethnic groups and communities as appropriate to provide advice around the benefits of water fluoridation.

Community debate around the merits of water fluoridation is on-going. Discussions about water fluoridation are characterised by strongly held opinions on both sides. There is a need to distinguish fact from fiction and ensure that emerging research is considered in communications on water fluoridation.

The national water fluoridation support and coordination service will take a proactive role in assisting DHBs and the Ministry respond to factually incorrect statements about water fluoridation, and in promoting the benefits of fluoridation. The service will also be proactive in liaising with local authorities and in communicating with the sector about the status and relevance of new information on fluoridation.

## 1.2 Purpose and Objectives

NFIS is an information and advisory service which will support District Health Boards and Territorial Local Authorities by providing robust and independent scientific and technical information, advice and critical commentary around water fluoridation.

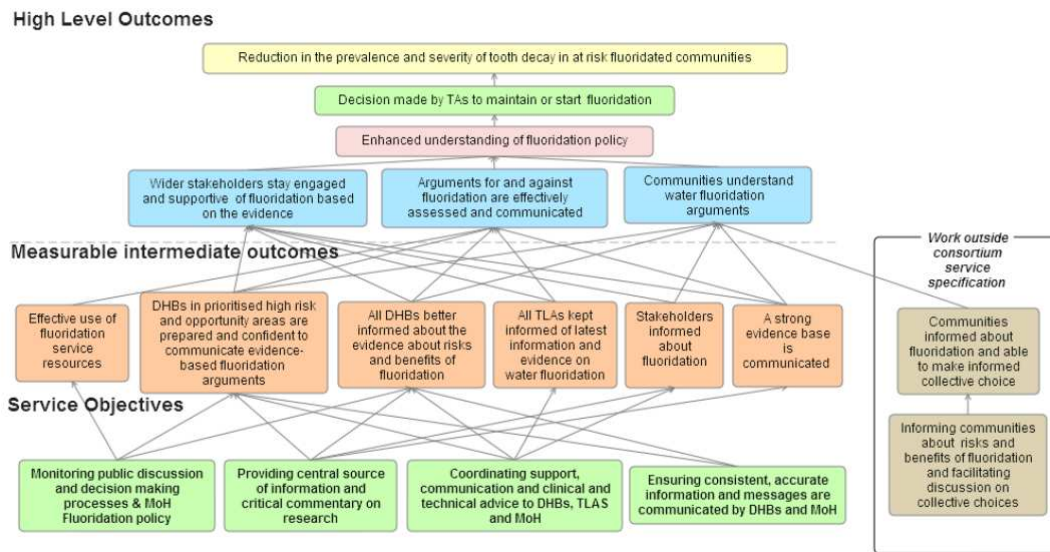
NFIS will be provided by a consortium of partners led by Regional Public Health at Hutt Valley District Health Board. The consortium includes Hutt Valley DHB Community Dental Service, Environmental Science and Research, National Poisons Centre and Centre for Public Health Research at Massey University. The consortium includes expertise around epidemiology, oral health, public health medicine, toxicology, pharmacology and water chemistry

The objectives of the consortium are to provide both proactive and reactive services to:

- i. Monitor public discussion and decision-making processes on water fluoridation in New Zealand
- ii. Provide a central authoritative, accurate and up-to-date source of information and critical commentary on research pertaining to fluoridation:
- iii. Coordinate support, communication and clinical and technical advice to, and on behalf of DHBs and the Ministry
- iv. Ensure consistent, accurate, up-to-date information and messages are communicated by DHBs and the Ministry
- v. Evaluate the effectiveness of the Service in advancing water fluoridation

A visual representation of these objectives and intermediate outcomes the project is trying to achieve are presented in Figure 1.

**Figure 1. Visual presentation showing the link between Service Objectives and desired Outcomes**



## 2.0 EVALUATION OF NFIS

### 2.1 Background

Under the leadership of Regional Public Health (RPH) the consortium has developed an annual plan to execute the NFIS guided by the 5 key objectives outlined in section 1.2 during 2010-11. The annual plan will be superseded by annual plans for 11-12 and 12-13.

This document outlines the activities RPH proposes to undertake to evaluate the service. It is intended to be a living document that will evolve based on feedback and as the service develops.

In this evaluation plan we propose up to three strands of evaluation formative, process and impact evaluation (Waa, Holibar, & Spinola, 2000), each having a slightly different purpose.

2.2 **Formative evaluation** will be used to plan, refine and improve the programme as it is developed and implemented.

2.3 **Process evaluation** will monitor the implementation of the program based on key indicators and milestones

2.4 **Impact evaluation** will look at the extent to which the programme has been effective in achieving the outcomes identified in the programme

logic. However, the level of impact evaluation that can be undertaken will depend on the extent to which the programme has been implemented at the time of the evaluation, hence the effects it is reasonable to expect.

## 2.2 Formative Evaluation

The purpose of formative evaluation is to ensure that the project is built on a sound solid foundation. To this end, the objectives of formative evaluation will focus on:

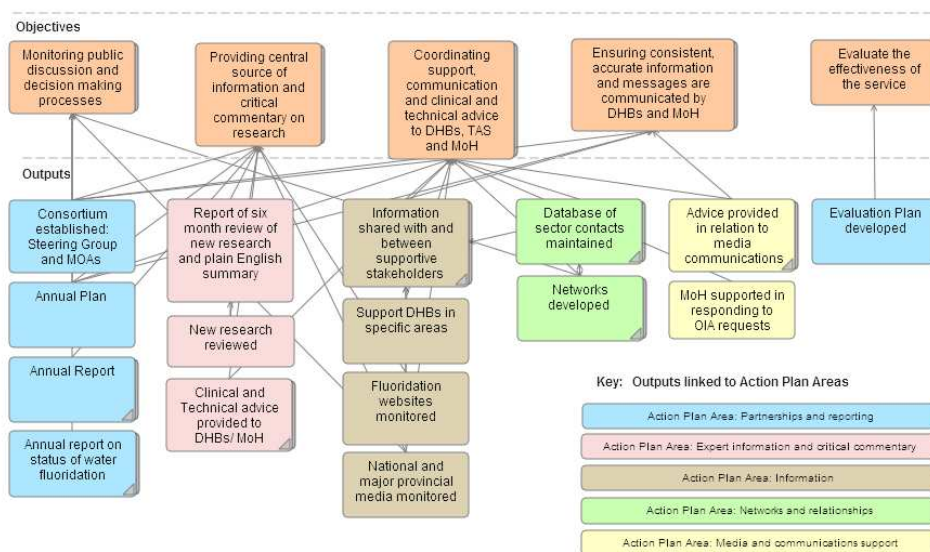
- i. Ensuring that the programme is built on a sound logical foundation
- ii. Providing an account of how the programme was planned and organised

## 2.3 Process Evaluation

The programme will be carrying out a series of activities and outputs in order to achieve its objectives and desired outcomes. The relationship between the activities and outputs and the programme objectives are shown in Figure 2. The purpose of process evaluation is to monitor the progress of project implementation. It will focus on answering specific questions about the extent to which project activities and outputs have been carried out and delivered and milestones met.

The process evaluation of this project will focus on providing data on the general questions presented in Table 1.

**Figure 2. Proposed Outputs in relation to the Project Objectives**





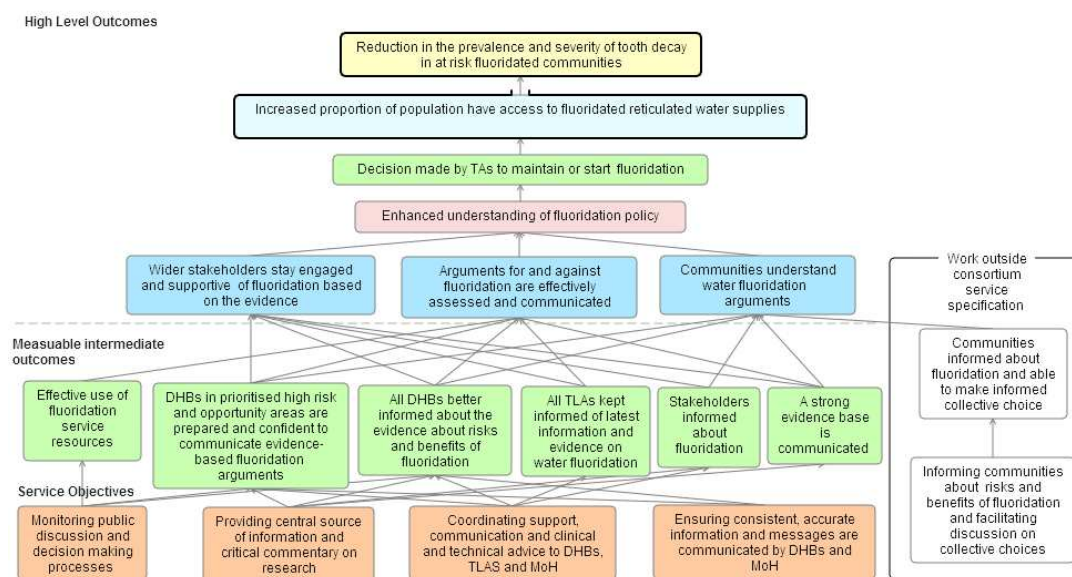
**Table 1. Tentative Process Evaluation Questions and Sources of Data**

| <b>Evaluation Question</b>   | <b>Methods</b>  | <b>Sources of Data</b>                    |
|--|---|---|
| To what extent has the NFIS managed to update and refresh the HIIRC Oral Health Forum Website and/or NFIS website with national and international information?                                       | Website audit   | Website                                   |
| To what extent has NFIS managed to monitor national media to identify potential issues and alert local public health and oral health services as necessary?  | Review of national media monitoring reports                                   | Program records                           |
| To what extent has NFIS managed to carry out an ongoing literature review and reports to provide a central information source for fluoridation issues?   | Review of reports on literature review on fluoridation                        | Program records                           |
| To what extent have DHBs, PHUs and the MoH (i.e. Oral Health, Communicable disease, Environmental Health Team, and Portfolio Managers) been updated with relevant information of water fluoridation? | Survey of key officials at the MoH, PHUs and other related portfolio managers | MoH, PHUs and relevant portfolio managers |
| To what extent has NFIS managed to provide DHBs, PHUs and other stakeholders with useful, timely information and advice at the right level, content and format?                                      | Survey of key officials at DHBs, PHUs and possibly other related stakeholders | DHBs, PHUs and related stakeholders       |
| What assistance has the NFIS consortium provided to DHBs to respond to emerging fluoride issues?   | Review of records   | Program records                           |

## 2.4 Impact Evaluation

The purpose of impact evaluation is to inform the stakeholders on the extent to which the program has managed to realize its planned outcomes. Impact evaluation will focus on answering specific questions on the extent to which the consortium has managed to deliver on intermediate outcomes presented in the Logic Model in Figure 3.

**Figure 3. Intermediate Outcomes upon which the Impact Evaluation of the Project will be based**



Based on the programme Logic Model in Figure 3 some tentative evaluation questions will centre around but not limited to the list presented in Table 2. The tentative evaluation methods that will be used to collect data and the sources of such data are also summarized in the table.

**Table 2. Tentative Impact Evaluation Questions and Sources of Data**

| Evaluation Question   | Methods  | Sources of Data                         |
|---|--|---|
| To what extent are DHBs more confident in talking about fluoridation issues?  | Survey of key officials at DHBs                                      | All DHBs and other related Stakeholders |
| To what extent has the ability of DHBs to communicate fluoridation arguments improved?  | Survey of key officials at DHBs                                      | All DHBs and other related Stakeholders |
| To what extent has NFIS perceived as an accessible and credible source of information on water fluoridation?                                      | Survey of key officials at DHBs, PHUs and other related stakeholders | DHBs, PHUs and related stakeholders     |
| To what extent are DHBs and PHUs and other stakeholders more and better informed and more confident to talk about issues related to fluoridation? | Survey of key officials at DHBs, and PHUs                            | DHBs, and PHUs                          |
| In areas where intervention has been required: how useful and effective was the support provided?   | Survey of key officials at DHBs, and PHUs                            | DHBs, and PHUs                          |

### 3.0 EVALUATION METHODS

RPH will adopt a mixed-method approach as needed in generating relevant information during the formative, process and impact evaluation of this project. These will include audits; desk review of hard copy and electronic literature and reports on fluoridation; E-mail surveys; and key informant interviews. The evaluation efforts will be geared at generation data that will inform the implementation process of the project.

Since this is an intervention project a two phase evaluation approach is proposed. Phase one will involve the establishment of a baseline data on knowledge, perceptions and levels of confidence in addressing fluoride issues. Phase two will be carried out midway in the implementation of the project to determine the extent to which the project has successfully implemented the planned activities. Phase three will be a repeat of the same questions asked in Phase I on the same target group to determine the outcome of the interventions. However, the decision whether this plan will take all the phases of evaluation on board will depend on the preferences of the consortium and availability of financial resources.

### 4.0 STAKEHOLDERS

The evaluation activities proposed in this plan will focus on collecting information on the extent to which the NFIS stakeholders have achieved the activities they set out do in this project (process evaluation) and the extent to which the execution of these activities have managed bring about the outcomes (impact evaluation) envisioned in the project. In generating the relevant data during the three types of evaluation proposed in this plan focus will be on identifying key target stakeholders for NFIS. They are likely to include but not limited to the list presented in Table 3.

**Table 3. Tentative List of Stakeholders for the Evaluation Activities for the NFIS**

| Nos: | Stakeholders  | Tentative number (n) |
|------|---|----------------------|
| 1.   | District Health Boards (position responsible for fluoride issues) | 20                   |
| 2.   | Other Senior Officials from selected DHBs                         | 5                    |
| 3.   | Other recipients of fluoride information (i.e. TLAs)              | 5                    |
| 4.   | RPH Project Team and Sponsors                                     | 4                    |

This evaluation plan remains flexible with regards to which other stakeholders should be included in the evaluation.

## 5.0 RISKS

A number of possible risks likely to interfere with the execution of this plan and tentative mitigation strategies are presented in Table 4.

**Table 4. Risks and Mitigation Strategies**

| Nos | Type of Evaluation               | Risks  | Mitigation   |
|-----|----------------------------------|--|--|
| i.  | Formative and process Evaluation | i. Poor project documentation and record keeping   | Educate the project team on the importance of documentation  |
|     |                                  | ii. Poor cooperation from target groups  | Educate target groups on the nature of the project and their role in making it happen  |
| ii. | Impact Evaluation                | i. Programme has not fully implemented the planned activities at the time the evaluation is due to take place - it may not be sensible to attempt an impact evaluation (Waa et al., 2000) <sup>i</sup> | i. Ensure six monthly project reports are accompanied by information on whether the project is on track or not<br>ii. Ensure that the project is run on schedule |
|     |                                  | ii. Poor cooperation from target groups  | Educate target groups on the nature of the project and their role in making it happen  |
|     |                                  | iii. Lack of financial resources   | Educate the Consortium on the importance of impact evaluation so as to set aside resources for the activity  |

<sup>i</sup> Waa, A., Holibar, F., & Spinola, C. (2000). *Programme Evaluation: An introductory guide for health promotion*. Auckland: University of Auckland.

## 6.0 IMPLEMENTATION TIMELINE

| Activities   | Year 1 |  |  |  |  |  |  |  |  |  |  |  | Year 2 |  |  |  |  |  |  |  |  |  |  |  | Year 3 |  |  |  |  |  |  |  |  |  |  |  |
|--|--------|--|--|--|--|--|--|--|--|--|--|--|--------|--|--|--|--|--|--|--|--|--|--|--|--------|--|--|--|--|--|--|--|--|--|--|--|
| i. Develop a detailed programme logic  |        |  |  |  |  |  |  |  |  |  |  |  |        |  |  |  |  |  |  |  |  |  |  |  |        |  |  |  |  |  |  |  |  |  |  |  |
| ii. Develop indicators to track the progress and quality of activities   |        |  |  |  |  |  |  |  |  |  |  |  |        |  |  |  |  |  |  |  |  |  |  |  |        |  |  |  |  |  |  |  |  |  |  |  |
| iii. Hold quarterly meetings between the project manager and stakeholders to review progress against indicator |        |  |  |  |  |  |  |  |  |  |  |  |        |  |  |  |  |  |  |  |  |  |  |  |        |  |  |  |  |  |  |  |  |  |  |  |
| iv. Evaluation plan approved by the Ministry of health   |        |  |  |  |  |  |  |  |  |  |  |  |        |  |  |  |  |  |  |  |  |  |  |  |        |  |  |  |  |  |  |  |  |  |  |  |
| v. Further develop idea of baseline survey   |        |  |  |  |  |  |  |  |  |  |  |  |        |  |  |  |  |  |  |  |  |  |  |  |        |  |  |  |  |  |  |  |  |  |  |  |
| vi. Target groups for project evaluation identified  |        |  |  |  |  |  |  |  |  |  |  |  |        |  |  |  |  |  |  |  |  |  |  |  |        |  |  |  |  |  |  |  |  |  |  |  |
| vii. Carry out project baseline evaluation (Phase I)   |        |  |  |  |  |  |  |  |  |  |  |  |        |  |  |  |  |  |  |  |  |  |  |  |        |  |  |  |  |  |  |  |  |  |  |  |
| viii. Carry out mid-term project implementation review (Phase II)  |        |  |  |  |  |  |  |  |  |  |  |  |        |  |  |  |  |  |  |  |  |  |  |  |        |  |  |  |  |  |  |  |  |  |  |  |
| ix. Carry out impact evaluation (Phase III)  |        |  |  |  |  |  |  |  |  |  |  |  |        |  |  |  |  |  |  |  |  |  |  |  |        |  |  |  |  |  |  |  |  |  |  |  |

## REFERENCES

Waa, A., Holibar, F., & Spinola, C. (2000). *Programme Evaluation: An introductory guide for health promotion*. Auckland: University of Auckland.