

**IN THE HIGH COURT OF NEW ZEALAND
NEW PLYMOUTH REGISTRY**

CIV 2013-443-107

UNDER **the Judicature Amendment Act 1972 and the
Declaratory Judgments Act 1908**

IN THE MATTER **of an application for judicial review and an
application for a declaration**

BETWEEN **NEW HEALTH NEW ZEALAND INC**
Plaintiff

AND **SOUTH TARANAKI DISTRICT COUNCIL**
Defendant

AFFIDAVIT OF STAMOULIS LITRAS

Dated 4 November 2013

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I, **Stamoulis Litras**, dentist of Wellington affirm:

1. I am known as Stan Litras.
2. I am a self-employed dentist practising in Wellington.
3. I graduated with a BDS from Otago University in 1981. I also have a BSC in Psychology (1978) from Victoria University.
4. I have been in private practise continually since graduating from Otago. I am a member of the New Zealand Dental Association. I am a past President of the Wellington branch. I am a member of the New Zealand Academy of Cosmetic Dentistry.
5. Over the course of two science-based degrees I have had training in the scientific method and experimental methodology design (particularly under the experimental psychology papers) and have designed and participated in several (unpublished) experimental studies, including research in cariology as an assistant to Professor John C Rodda at Otago University Dental School in the late 1970s.
6. In over 30 years of practising dentistry, I have developed the skill of critically examining research in order that my practice of dentistry is evidence-based.
7. I have read, understood, and agree to comply with the Code of Conduct for expert witnesses.
8. I have read the affidavits of Gregory Simmons, John McMillan, Howard Wilkinson, Robyn Haisman-Welsh, Robin Whyman and Sandra Pryor.
9. I have been asked by the plaintiff to reply to the following points:
 - 9.1. The topical mechanism of fluoride action.
 - 9.2. A brief comment on the 2004 Lee and Dennison study and the Oral Health Survey 2010.
 - 9.3. Tooth decay rates in New Zealand..

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- 9.4. Tooth decay rates in Taranaki.
- 9.5. Dental fluorosis.
- 9.6. Reducing oral health inequalities
- 9.7. Alternatives to water fluoridation.

Topical mechanism of action

Changing science

10. In the belief that higher levels of fluorine compounds in drinking water reduced decay, water fluoridation was implemented in the 1940s in USA, followed shortly thereafter by New Zealand, on the basis of two assumptions:
 - 10.1. that fluorine compounds needed to be swallowed, taken into the bloodstream and then incorporated into tooth enamel during formation; and
 - 10.2. that fluorapatite was more resistant to tooth decay than hydroxyapatite.
11. It was known that nutrients like iodine and calcium had to be swallowed, taken into the bloodstream, and incorporated into the human body. It was assumed that fluorine compounds worked in the same way. Tablets of sodium fluoride were even given to pregnant women in the expectation that this would strengthen the unborn child's tooth enamel in the womb.
12. In 1999, one of the foremost researchers in the field, J D Featherstone proved that the action of fluoride was topical, and any systemic effect was negligible or non-existent. He showed that any benefit fluoride may have occurs after teeth have erupted (come through the gum and appeared in the mouth).¹

¹ Featherstone, JDB. Prevention and reversal of dental caries: role of low level fluoride. Community dent oral Epidemiol 1999; 27: 31-40.

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13. He concluded:

"Until recently the major caries-inhibitory effect of fluoride was thought to be due to its incorporation in tooth enamel during the development of the tooth prior to eruption. This supposed mechanism was behind public health efforts..... There is now overwhelming evidence that the primary caries-preventive mechanisms of action of fluoride are post-eruptive through 'topical' effects for both children and adults."

"The topical effects of fluoride are over-riding, and the systemic incorporation of fluoride in tooth mineral is unfortunately not a major benefit."

"[t]he concentration of fluoride in dental enamel and dentin provided by fluoridation of drinking water or by natural fluoride levels at about 1ppm is insufficient to provide protection against caries."

"The effects are all via the [topical] mechanisms of inhibition of demineralization, enhancement of remineralization and action on bacteria."

14. Featherstone describes that the benefit from fluoride is from continued elevated levels in the saliva and plaque caused by initial application of high concentration fluoride such as in toothpaste.
15. This represented a significant shift in understanding and in my opinion calls into question the whole basis of water fluoridation.²

What is dental caries and how does fluoride work

16. Dental plaque is a colonization of microbiota which attach to the tooth enamel and each other in sequence. Some of the bacteria, notably strep. Mutans can break down sugars in the diet to form acids.

² Hellwing E, Lennon AM (2004) Systemic versus topical fluoride. *Caries Res* 38:258–262. Fejerskov O (2004) Changing paradigms in concepts on dental caries: consequences for oral health care. *Caries Res* 38:182–191. Centers for Disease Control and Prevention (2001) Recommendations for using fluoride to prevent and control dental caries in the United States. *MMWR Morb Mortal Wkly Rep* 50:1–42. Limeback H (1999) A re-examination of the pre-eruptive and post-eruptive mechanism of the anti-caries effects of fluoride: is there any anti-caries benefit from swallowing fluoride? *Community Dent Oral Epidemiol* 27:62–71.

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17. The action of the acidic attack is to alter the natural equilibrium of ionic exchange between the enamel and its environment (plaque), encouraging flow of calcium out of the enamel (demineralization).
18. The dissolution of the tooth enamel and underlying dentin as a result of plaque acids is known as dental caries or tooth decay, and eventually results in cavitation.
19. The initial lesion occurs just below the surface to a depth of around a maximum of 200 microns.
20. Fluoride ions available in the saliva bind with the plaque and, under the right conditions, can flow through to the underlying enamel to encourage a reversal of ion flow into the enamel (remineralization), exchanging for hydroxyl groups and lowering solubility products of precipitating calcium phosphates encouraging the reformation of less soluble carbonates, thus slowing down the development of the lesion.
21. However, fluoride has no effect on intact enamel. It requires:
 - 21.1. That a carious lesion is already in progress.
 - 21.2. Plaque on the tooth surface is required to "bind" the fluoride in the area.
 - 21.3. Salivary fluoride concentration needs to be at least 0.03 ppm to have a remineralizing effect.³
22. It is generally well accepted now that fluorapatite is not more acid resistant than hydroxyapatite. Scandanavian researchers compared shark enamel (100% fluorapatite) with human tooth enamel and found no reduction in

³ Featherstone JDB (1999) Prevention and reversal of dental caries: role of low level fluoride. Community Dent Oral Epidemiol 27:31-40.

Fejerskov O (2004) Changing paradigms in concepts on dental caries: consequences for oral health care. Caries Res 38:182-191.

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solubility. Many studies have confirmed this.⁴

23. As fluoridated water passes fleetingly over the teeth, its topical effect will be likely to be insignificant because the concentration of 1ppm is negligible compared to other topical application modalities.⁵
24. Rather it appears the action of fluoride to assist remineralization of early cavities in tooth enamel, which it does in bursts during the day, is related to the use of high dose topical fluoride such as toothpaste or fluoride mouth rinses , varnish and gels. ⁶
25. After brushing with toothpaste with 1000ppm fluoride, fluoride levels in saliva are elevated to the levels required to achieve a cariostatic action, and fall back to baseline levels over 2-6 hours.⁷
26. However, as confirmed by the CDC fluoride concentration in saliva from water fluoridation is too low to provide any cariostatic effect.

⁴ GAARD B. ROLLA G , RUBENJ. DEJMAN T , ARENTJS J. Microradiographic study of demineralization of shark enamel in a human caries model. Scand J Dent Res 1988; 96: 209-211.

⁵ Damato, F.A. (1990). "Effect of fluoride concentration on remineralization of carious enamel." Caries Res. 24(3):174-8.

Arends, J, Christoffersen, J, Ruben, J & Jongbloed, WL (1989) "Remineralisation of bovine dentine in vitro. The influence of the F content in solution on mineral distribution." Caries Res. 23. 309-14.

Tanaka, M. (1993). "Effect of fluoride incorporation into human dental enamel on its demineralization in vitro." Arch Oral Biol. 38(10):863-9.

JDB Featherstone Community J dent Epidemiology 1999:27.

Zero DT, Raubertas RF, Fu J, Pederson AM, Hayes AL and Featherston JDB, "Fluoride concentrations in plaque, whole saliva and ductal saliva after application of homeuse topical fluoride" J of Dent Res Vol 71, No. 11, 1768 – 1775, Nov 1992.

Naumova EA, et al. Influence of individual saliva secretion on fluoride bioavailability. Open Dent J 2010 August 27; 4:185-90. Epub 2010.

⁶ Martens LC , verb eek RM mechanism of action of fluorides in local/topical application. Rev. Belge Med Dent (1984) 1998;53(1):295-308.

⁷ Low-levels of fluoride in plaque and saliva and their effects on the demineralisation and remineralisation of enamel; role of fluoride toothpastes.: R J M Lynch, R Navada, R Walia Journal : International dental journal Date : 54-5 Suppl 1 2004.

The concentration of fluoride in ductal saliva, as it is secreted from salivary glands, is low --- approximately 0.016 parts per million (ppm) in areas where drinking water is fluoridated and 0.006 ppm in nonfluoridated areas. This concentration of fluoride is not likely to affect cariogenic activity.”⁸

27. Moreover, it has been shown recently that the thickness of the plaque layer together with the concentration of fluoride and the duration of exposure are vital determinants as to whether fluoride available in the saliva will have an effect in caries reduction.
28. Leeds university oral biologist C Robinson, showed that fluoride from saliva gets absorbed mostly in the outer layers of the dental plaque, with concentrations falling the deeper into the plaque you get. His research suggested fluoride at a concentration of 1000 ppm probably never gets to the underlying (demineralizing) enamel surface if the biofilm (the precursor to plaque) is more than approximately 500 microns (half a millimetre).⁹
29. It follows, therefore, that fluoride in the water would be of little benefit as a topical caries preventive agent in children who don't clean their teeth. This is because:
 - 29.1. The topical effect , at 1ppm while swallowing the water, is fleeting and at best would occur only within 15 minutes after brushing.
 - 29.2. The concentration returning in the saliva is at most 0.016ppm, well below the 0.03ppm required for remineralization.¹⁰

⁸ CDC MMWR Recommendations for using fluoride to prevent and control dental caries in the United States, p3.

⁹ Robinson, C, Fluoride and the caries lesion: interactions and mechanism of action. European archives of Paediatric Dentistry, 2009;10, no 3, 136-140.

Watson PS et al Penetration of Fluoride into Natural Plaque Biofilms, JDent Res 84(5) 451-55, 2005

¹⁰ Featherstone JDB (1999) Prevention and reversal of dental caries: role of low level fluoride. Community Dent Oral Epidemiol 27:31-40.

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30. In the continuum of the demineralisation-remineralisation process, the cariostatic effect of topical fluoride occurs in bursts during those times when the salivary levels of fluoride rise above 0.03ppm, (as occurs for a few hours after brushing with fluoridated toothpaste) and when the plaque thickness over the demineralizing area is small enough to allow diffusion of the Fluoride to the enamel surface.
31. Although we now understand that the beneficial effects of fluoride come from the teeth being bathed in low concentrations in saliva constantly throughout the day so that it is available at the time demineralization is occurring, researchers are referring to concentrations above 0.03ppm, and this is not available from recirculating saliva (ductal saliva) from drinking water, but from fluoride remaining in the mouth (pooled saliva) after use of high concentration topical applications like 1000ppm fluoride toothpaste.

Lee and Dennison study

32. This study is referred to by Dr Whyman and some of the defendant's other witnesses. In my opinion this study is of dubious validity because of its methodology. In particular there was no control for researcher bias, no double blinding, no standardization of recording and no verification of data. It also took no account of confounding factors such movement between fluoridated and non-fluoridated areas, use of other sources of fluoride or socioeconomic factors.
33. There are two particular aspects I wish to comment on.
34. First, the researchers used 1996 data, comparing Canterbury with Wellington. They did not identify any basis for choosing these two regions or explain why they used 1996 data. Other comparisons, for which data was also available, would have given the opposite results. For example comparing five year olds in non-fluoridated Manawatu-Whanganui (1.21 DMFT) with fluoridated Hawkes Bay (2.18 DMFT) shows 80% more decay in the fluoridated area. 12 year olds in unfluoridated Nelson-

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Marlborough (1.29 DMFT) had 31% less decay than fluoridated Southland (1.88).¹¹

35. Secondly, the researchers elected to use the DMFS (surfaces) scale, rather than the DMFT (teeth) which is generally used. One DMFT is equivalent to about 5 DMFS (5 tooth surfaces in each molar tooth, 4 in front teeth). Even with these manipulations, the difference they found was 1 DMFS, (2.4 compared to 1.4) or about a quarter of a filling by age.
36. This is sometimes relied on as showing there is a 41% reduction of tooth decay ($1/2.4 \times 100$).
37. Looking at it holistically, however, considering there are 128 tooth surfaces in a mouth, the reduction in tooth decay, can be correctly stated as $2.4-1.4/128 \times 100 = 0.78\%$.
38. The raw data from the Ministry of Health is attached and marked "A".
39. Graphs of the 1996 raw data for 5 year olds and 12 olds are attached and marked "B" and "C" respectively.

Our Oral Health 2010

40. This survey was undertaken for the Ministry of Health to give a "snapshot" of New Zealanders' oral health.
41. It makes several disclaimers as to the applicability of its conclusions. For example:
 - 41.1. It states: "the 2009 OHS is a sample survey at one point in time and can be used to examine associations between oral health and sociodemographic characteristics. However, readers of this report need to be aware that associations do not necessarily imply causality."
 - 41.2. And "although this survey was not designed as an in-depth water fluoridation study, data were examined...."

¹¹ Ministry of Health, oral health data 1996.

42. In my opinion the accuracy of the data is poor, with anomalies in sample size numbers making any data null and void. An errata was published in March 2011: "there has been a revision to chapter 3: Methods, page 36. It should read: a total of 3196 New Zealanders were dentally examined, including 2209 adults aged 18 years and over and 987 children and adolescents aged 2-17 years. Among adults, 781 Maori, 219 Pacific, 380 Asian and 1353 European/other adults were dentally examined. Among children and adolescents aged 2-17 years, there were 461 Maori, 184 Pacific, 171 Asian and 570 European/other children and adolescents dentally examined."
43. These figures also appear in the data Table C2 the end of the book. The validity of the data is in question when the sample size, even after errata correction, is still out by around 40%.
44. This is demonstrated by the table C2 which says that a total of 987 children were examined. But the individual ethnic numbers add up to 1386, not 987. Individuals could only select one ethnicity.
45. And Table C3 identifies a total number of 2209 adults comprising 781 plus 219 plus 380 plus 1353. However the total number based on the individual figures is actually 2733.
46. In my opinion this throws the figures and conclusions into question.
47. Assuming the age group data are accurate, the number of children actually examined in the 5 to 11 year age group (438) was evenly proportioned, then that would mean that less than 100 children per age group year in that age range would have been examined (ie 438 divided by 6).
48. It is very difficult to draw conclusions based on such small sample sizes.
49. A copy of Tables C2 and C3 are attached and marked "D".

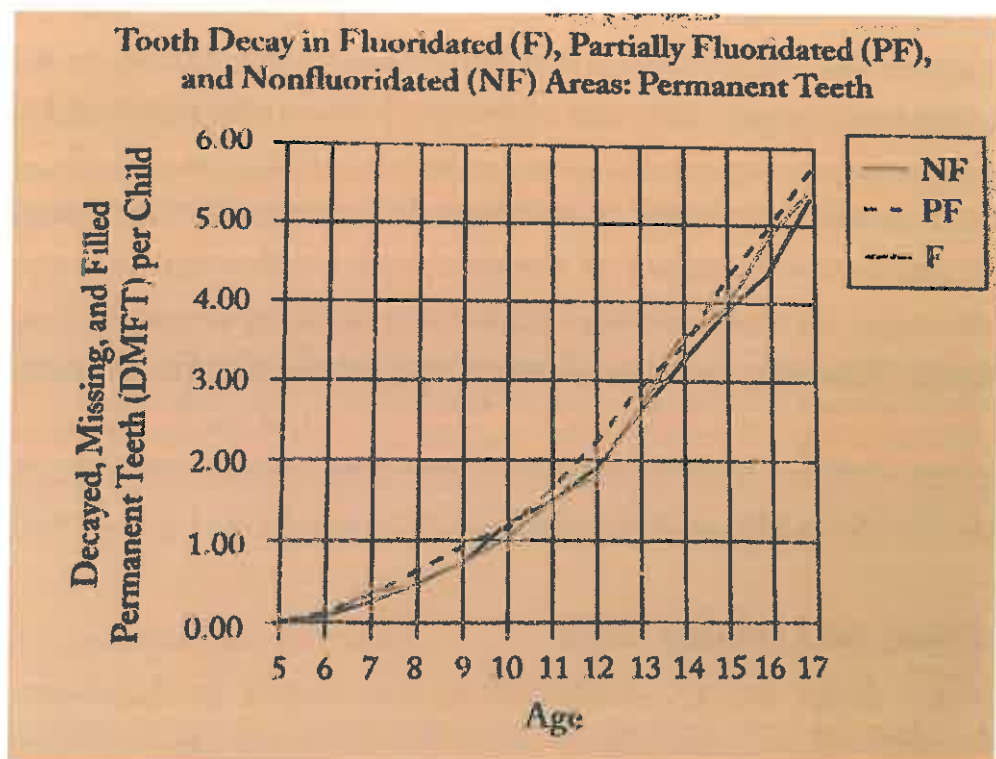
Tooth decay rates in New Zealand overall and in Taranaki in particular

50. The York Report 2000, undertaken for the UK MOH, was the biggest study of fluoride research to that time. They found of all research papers

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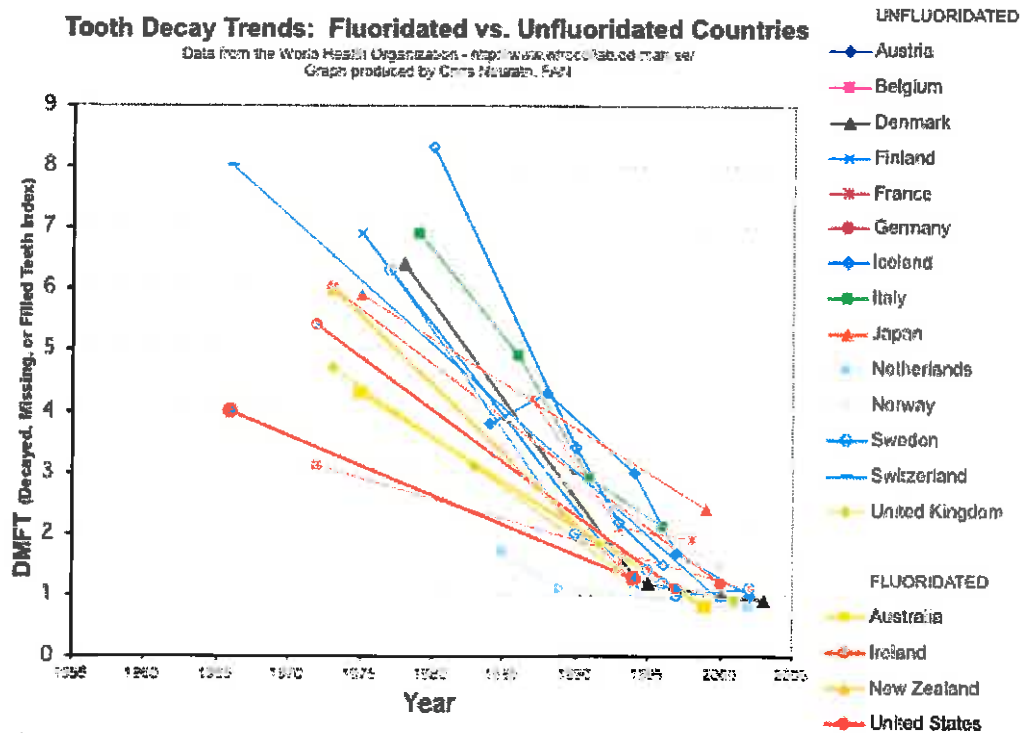
from 1945 until January 2000, in any language, only 214 were of a minimal adequate scientific quality to take into consideration. Most were of very poor methodology, in not allowing for confounding factors or researcher bias for example. They considered at that time the weight of evidence suggested an increase in percent caries-free children in fluoridated communities of under 15%.

51. In 1986 the National Institute of Dental Research in the largest US study of its kind, examined 39,000 schoolchildren in 84 communities USA. The difference in 5-17 year olds in DMFS (surfaces) was a negligible 0.6 of a tooth surface (out of around 140 surfaces). After correcting calculations errors by the original researchers, Yiammounyianis showed the decay rates in fluoridated, non-fluoridated, and partially fluoridated communities were identical.¹²



¹² Yiammounyianis JA, Water Fluoridation and Tooth Decay: results from the 1986-87 national survey of US school children, Fluoride 23, 2 (1990) 55- 67.

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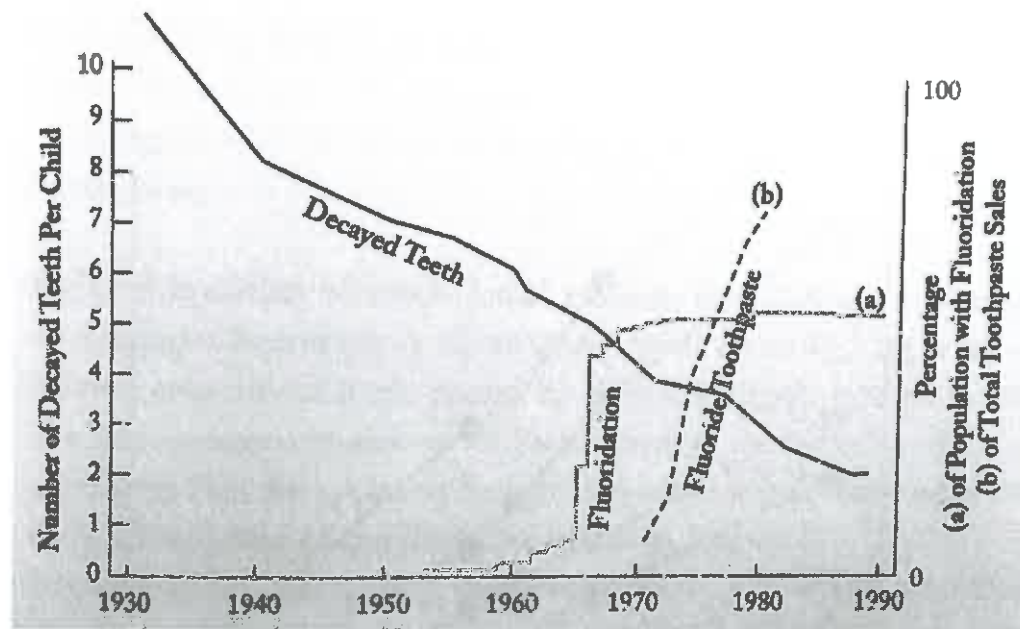


52. WHO data (2012) above show no differences between fluoridated and non fluoridated communities.¹³
53. New Zealand data is recorded by the school dental service each year, the last figures available from 2011. It recorded data from around 45,000 5 year olds and 45,000 12 year olds and is available on the Ministry of Health website under the Oral Health section.
54. Tooth decay was falling in New Zealand at the same rate even before fluoridation was in widespread use as shown by the graph below.¹⁴

¹³ WHO collaborating centre for Education, Training and Research in Oral Health, Malmö University, Sweden <http://www.mah.se/CAPP/>.

¹⁴ Colquhoun J, (1984) new evidence on fluoridation. Social science and Medicine 19: 1239-1246. de Liefde B, (1998), the decline of caries in New Zealand over the past 40 years. NZDJ, 94: 109-113.

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55. Currently, the average caries rate in 12 years olds in New Zealand is less than 2 DMFT out of 24 to 28 teeth. Reducing DMFT by even 30% still is only less than one filling.
56. In my opinion this is hardly a major benefit conferred by water fluoridation.
57. Treatment by filling takes approximately 15 minutes and is painless with the use of local anaesthetic.
58. In my experience the quality of life of a child with 1 or 2 or even 5 to 10 fillings is not affected by the number of fillings per se.
59. Based on the Ministry of Health's 2011 figures, the percentage of caries free 5 year olds in fluoridated areas is 59.91% (population 25,849) and in non-fluoridated areas 59.18% (18,804).
60. For year 8 children the figures are 55.17% caries free in fluoridated areas compared with 51.79% in non-fluoridated areas.
61. A copy of the Ministry of Health's 2011 figures for 5 and 12 years olds is attached and marked "E".

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62. I have also prepared the time series graphs above for 5 and 12 year olds from the website data.
63. Using the figures in Appendix E for 5 year olds shows that there are non fluoridated areas that have lower decay rates than fluoridated areas, and vice versa. However, overall the differences are insignificant.
64. For example, looking at populations with similar numbers of fluoridated and nonfluoridated children such as Waikato show 64.12 % of children are

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caries free in non-fluoridated areas compared with 57.60% in fluoridated areas.

65. Southern DHB also has similar numbers in fluoridated and non-fluoridated areas. 69.48 % of children are caries free in non-fluoridated areas compared with 71.17% in fluoridated areas.
66. In the data for Taranaki, there little difference between fluoridated and non- fluoridated communities.
67. Although Maori and Pacific Islanders generally appear to have higher decay rates than European in these figures, there are ethnic differences in maturity and tooth eruption which are not allowed for. Teeth in these ethnic groups are often in the mouth, so exposed to plaque acids, for up to a year and a half longer than the teeth of Europeans of the same age.¹⁵
68. It has also been shown that tooth eruption is delayed in fluoridated communities by up to 9 months.¹⁶
69. When the differences in eruption times between different ethnicities, and between fluoridated and non fluoridated communities is taken into account, any small apparent benefits to the decay rate are nullified.
70. Finally, to my knowledge there has not, to date, been any reliable research evidence to show that water fluoridation provides any statistically or clinically significant oral health benefit to adults.¹⁷

¹⁵ Advanced dental maturation in New Zealand Maori and Pacific Island children. Moananui RT ; Kieser JA ; Herbison P ; Liversidge HM. American Journal Of Human Biology: 2008 Jan-Feb; Vol. 20 (1), pp. 43-50.

Karangaratman, NZDJ 2012.

¹⁶ Komarek et al 2005, Peirisi et al International journal of Paediatric dentistry 2009; 19: 367-376.

¹⁷ S O Griffin, E Regnier, P M Griffin, V Huntley (2007) "Effectiveness of Fluoride in Preventing Caries in Adults", *Journal of Dental Research* 86(5): 410 – 415.

Slade G D, Sanders A E, Do L, Roberts-Thomson K, Spencer A J "Effects of Fluoridated Drinking Water on Dental caries in Australian Adults" *J Dent Res* online 1 March 2013.

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Fluorosis

71. Fluoride ingestion systemically during tooth development can cause porosities in the enamel, known as dental fluorosis, which manifest as chalky patches (classified as mild), white and dark brown discolourations (moderate), and pitting and malformation of the enamel (severe).
72. This occurs because fluoride ions interfere with the normal function of the ameloblasts (enamel forming cells), generally during 10-20 months of age, when enamel formation is taking place.



73. Fluorosis is not the result of topical application of fluoride post eruption. This photo was taken last month of a new patient to my Wellington practice, in his thirties and having lived his whole life in fluoridated (0.7 ppm) Lower Hutt. This patient, like other patients I have treated for this condition has had self esteem issues and difficulties socialising. His wife asked him to visit me. The cost of correction in such cases is around \$1,100 per tooth. In my experience, patients undergoing such treatments do not consider that water fluoridation has saved them money, pain or suffering

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74. This would be classified as “moderate fluorosis” (white and brown stains in the enamel). I would see about 2-3 people a month in my private practice with this situation. I would estimate that of people who have spent their childhood lives drinking fluoridated water, 5-10% would be this severe.
75. I see patients with mild fluorosis several times a day, and have not met any who think it enhances the aesthetics of their teeth.

Health inequalities and alternatives to fluoridation

76. It is my opinion that even assuming water fluoridation reduces decay by 15%, it is of little if any benefit in reducing decay for people who don't clean their teeth and have a poor diet. If plaque is not removed from the teeth, any topical effect from fluoride in the water will be of limited benefit.
77. Tooth decay is caused by sugars in the diet (soft drinks, fast food) and lack of oral hygiene, not by fluoride deficiency.
78. Further, no amount of fluoridated water is going to prevent conditions like the nursing bottle syndrome pictured below. This condition is caused by parents leaving babies to suck on bottles filled with sugar drinks. Water fluoridation does not stop this from occurring. Any suggest fluoridation can overcome this amount of caries activity shows poor knowledge of the processes discussed above, with a mistaken belief that teeth become hardened against acids from incorporation of fluorides during development.



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79. In my opinion more effective, targeted preventive policies would include: banning soft drinks and sugary snacks in schools, fluoridated salt in fast foods and soft drinks in at risk areas, supervised tooth brushing programmes in schools, diet and oral hygiene education for low socio-economic families, and improved access to dental care. Such an approach may have spin -offs in prevention of growing endemic diseases in our society such as diabetes and obesity, which obviously share some causality factors. This approach is consistent with the UK National Health Service's "Childsmile" programme in Scotland.¹⁸
80. In addition, for those at high risk of dental caries I would recommend fluoride mouth rinses, and professionally applied gels and foams..

AFFIRMED at Wellington this 4th)
 day of November 2013)
 before me:)




A Barrister and Solicitor of the High Court of New Zealand

Sandra Catherine McIver

Age	Year	Fluoridation Status	District	Number of children	Children		Missing or Filled
					Carries Free	Filled	
5	1990	non-fluoridated	Northland	1,784	729	5,567	3.120516
5	1990	non-fluoridated	Auckland	1,971	1,054	3,878	1.967529
5	1990	non-fluoridated	Waikato	2,588	1,216	6,470	2.5
5	1990	non-fluoridated	Bay of Plenty	2,925	1,305	7,663	2.619829
5	1990	non-fluoridated	Tairāwhiti	310	129	818	2.63871
5	1990	non-fluoridated	Hawkes Bay	1,118	569	2,322	2.076923
5	1990	non-fluoridated	Taranaki	759	286	2,218	2.922266
5	1990	non-fluoridated	Manawatu-Wanganui	2,059	1,036	4,692	2.278776
5	1990	non-fluoridated	Wellington	461	206	1,135	2.462039
5	1990	non-fluoridated	Nelson-Marlborough	1,419	729	2,963	2.08809
5	1990	non-fluoridated	West Coast	394	163	1,142	2.898477
5	1990	non-fluoridated	Canterbury	4,715	2,565	9,312	1.974973
5	1990	non-fluoridated	Otago	966	485	1,998	2.068323
5	1990	non-fluoridated	Southland	772	365	1,743	2.257772
5	1990	fluoridated	Northland	86	45	132	1.534884
5	1990	fluoridated	Auckland	10,264	5,653	17,876	1.741621
5	1990	fluoridated	Waikato	2,407	1,146	4,814	2
5	1990	fluoridated	Bay of Plenty	342	171	610	1.783626
5	1990	fluoridated	Tairāwhiti	439	203	1,031	2.348519
5	1990	fluoridated	Hawkes Bay	816	456	1,334	1.634804
5	1990	fluoridated	Taranaki	815	426	1,413	1.733742
5	1990	fluoridated	Manawatu-Wanganui	1,013	536	1,944	1.919052
5	1990	fluoridated	Wellington	3,579	1,969	5,149	1.43867
5	1990	fluoridated	Nelson-Marlborough	0	0	0	#DIV/0!
5	1990	fluoridated	West Coast	0	0	0	#DIV/0!
5	1990	fluoridated	Canterbury	210	125	287	1.366667
5	1990	fluoridated	Otago	1,068	592	1,730	1.61985
5	1990	fluoridated	Southland	711	449	1,013	1.424754
12	1990	non-fluoridated	Northland	2,076	683	4,703	2.265414
12	1990	non-fluoridated	Auckland	2,097	742	3,967	1.89175
12	1990	non-fluoridated	Waikato	2,693	792	6,462	2.399554
12	1990	non-fluoridated	Bay of Plenty	2,836	976	6,262	2.208039
12	1990	non-fluoridated	Tairāwhiti	256	83	581	2.269531

THIS is the Exhibit marked with the letter A referred to in the annexed affidavit of STAMPOULIS LITRAS SWORN at Wellington this 14 day of November 2013 before me:

Brister
A Solicitor of the High Court of New Zealand

Raw_Data

12	1990 non-fluoridated	Hawkes Bay	1,261	450	2,557	2.027756
12	1990 non-fluoridated	Taranaki	767	110	2,346	3.05867
12	1990 non-fluoridated	Manawatu-Wanganui	2,180	698	4,924	2.258716
12	1990 non-fluoridated	Wellington	426	143	880	2.065728
12	1990 non-fluoridated	Nelson-Marlborough	1,543	606	2,943	1.907323
12	1990 non-fluoridated	West Coast	459	158	1,089	2.372549
12	1990 non-fluoridated	Canterbury	5,440	2,116	9,841	1.809007
12	1990 non-fluoridated	Otago	1,151	257	3,062	2.660295
12	1990 non-fluoridated	Southland	1,008	311	2,374	2.355159
12	1990 fluoridated	Northland	99	47	156	1.575758
12	1990 fluoridated	Auckland	11,115	4,389	19,190	1.726496
12	1990 fluoridated	Waikato	2,575	858	5,407	2.099806
12	1990 fluoridated	Bay of Plenty	526	215	836	1.589354
12	1990 fluoridated	Tairāwhiti	463	184	754	1.62851
12	1990 fluoridated	Hawkes Bay	1,078	409	1,996	1.851577
12	1990 fluoridated	Taranaki	950	323	1,990	2.094737
12	1990 fluoridated	Manawatu-Wanganui	1,074	362	2,040	1.899441
12	1990 fluoridated	Wellington	3,951	1,601	6,466	1.636548
12	1990 fluoridated	Nelson-Marlborough	n/a	0	0	#VALUE!
12	1990 fluoridated	West Coast	n/a	0	0	#VALUE!
12	1990 fluoridated	Canterbury	261	100	418	1.601533
12	1990 fluoridated	Otago	1,088	363	2,186	2.009191
12	1990 fluoridated	Southland	859	259	2,055	2.392317
5	1991 non-fluoridated	Northland	2,107	808	6,540	3.103939
5	1991 non-fluoridated	Auckland	2,046	1,057	4,087	1.997556
5	1991 non-fluoridated	Waikato	2,457	1,111	6,192	2.520147
5	1991 non-fluoridated	Bay of Plenty	1,797	676	6,054	3.368948
5	1991 non-fluoridated	Tairāwhiti	222	89	496	2.234234
5	1991 non-fluoridated	Hawkes Bay	1,177	508	3,205	2.723025
5	1991 non-fluoridated	Taranaki	744	317	1,963	2.638441
5	1991 non-fluoridated	Manawatu-Wanganui	2,195	1,178	4,390	2
5	1991 non-fluoridated	Wellington	352	166	856	2.431818
5	1991 non-fluoridated	Nelson-Marlborough	1,406	703	2,524	1.795164
5	1991 non-fluoridated	West Coast	403	168	991	2.459057
5	1991 non-fluoridated	Canterbury	5,458	2,938	10,903	1.997618
5	1991 non-fluoridated	Otago	997	539	2,470	2.477432

Raw_Data

5	1991 non-fluoridated	Southland	878	457	1,836	2.091116
5	1991 fluoridated	Northland	101	44	228	2.257426
5	1991 fluoridated	Auckland	10,496	5,976	17,622	1.678925
5	1991 fluoridated	Waikato	2,280	1,192	4,446	1.95
5	1991 fluoridated	Bay of Plenty	1,024	532	2,008	1.960938
5	1991 fluoridated	Tairāwhiti	440	203	985	2.238636
5	1991 fluoridated	Hawkes Bay	750	348	1,744	2.325333
5	1991 fluoridated	Taranaki	944	482	1,835	1.943856
5	1991 fluoridated	Manawatu-Wanganui	1,088	626	1,719	1.579963
5	1991 fluoridated	Wellington	4,465	2,459	7,018	1.571781
5	1991 fluoridated	Nelson-Marlborough	0	0	0	#DIV/0!
5	1991 fluoridated	West Coast	0	0	0	#DIV/0!
5	1991 fluoridated	Canterbury	144	89	169	1.173611
5	1991 fluoridated	Otago	1,055	622	1,641	1.55545
5	1991 fluoridated	Southland	764	414	1,262	1.651832
12	1991 non-fluoridated	Northland	2,056	844	3,873	1.883755
12	1991 non-fluoridated	Auckland	2,286	1,015	3,446	1.507437
12	1991 non-fluoridated	Waikato	2,577	948	5,231	2.02988
12	1991 non-fluoridated	Bay of Plenty	2,096	831	4,100	1.956107
12	1991 non-fluoridated	Tairāwhiti	204	91	354	1.735294
12	1991 non-fluoridated	Hawkes Bay	1,406	590	2,508	1.783784
12	1991 non-fluoridated	Taranaki	634	156	1,780	2.807571
12	1991 non-fluoridated	Manawatu-Wanganui	2,267	947	4,103	1.809881
12	1991 non-fluoridated	Wellington	375	130	749	1.997333
12	1991 non-fluoridated	Nelson-Marlborough	1,502	642	2,703	1.799601
12	1991 non-fluoridated	West Coast	406	153	727	1.79064
12	1991 non-fluoridated	Canterbury	5,461	2,415	8,572	1.569676
12	1991 non-fluoridated	Otago	1,119	296	3,145	2.810545
12	1991 non-fluoridated	Southland	915	259	2,488	2.719126
12	1991 fluoridated	Northland	100	53	129	1.29
12	1991 fluoridated	Auckland	11,114	5,033	16,651	1.4982
12	1991 fluoridated	Waikato	2,694	1,051	4,607	1.710097
12	1991 fluoridated	Bay of Plenty	1,307	610	1,854	1.418516
12	1991 fluoridated	Tairāwhiti	478	207	735	1.537657
12	1991 fluoridated	Hawkes Bay	831	413	1,157	1.392298
12	1991 fluoridated	Taranaki	1,140	318	2,166	1.9

Raw_Data

12	1991	fluoridated	Manawatu-Wanganui	1,063	408	1,956	1.840075
12	1991	fluoridated	Wellington	4,897	2,133	6,994	1.428221
12	1991	fluoridated	Nelson-Marlborough	0	0	0	#DIV/0!
12	1991	fluoridated	West Coast	0	0	0	#DIV/0!
12	1991	fluoridated	Canterbury	231	99	312	1.350649
12	1991	fluoridated	Otago	1,169	466	2,016	1.724551
12	1991	fluoridated	Southland	734	290	1,889	2.573569
5	1992	non-fluoridated	Northland	2,084	748	6,549	3.142514
5	1992	non-fluoridated	Auckland	2,190	1,219	3,936	1.79726
5	1992	non-fluoridated	Waikato	1,997	879	4,793	2.4001
5	1992	non-fluoridated	Bay of Plenty	2,177	850	6,688	3.072118
5	1992	non-fluoridated	Tairāwhiti	247	112	611	2.473684
5	1992	non-fluoridated	Hawkes Bay	1,300	622	3,382	2.601538
5	1992	non-fluoridated	Taranaki	622	256	1,639	2.635048
5	1992	non-fluoridated	Manawatu-Wanganui	2,140	1,126	4,473	2.090187
5	1992	non-fluoridated	Wellington	276	147	487	1.764493
5	1992	non-fluoridated	Nelson-Marlborough	1,377	761	2,430	1.764706
5	1992	non-fluoridated	West Coast	350	136	971	2.774286
5	1992	non-fluoridated	Canterbury	4,593	2,540	8,370	1.822338
5	1992	non-fluoridated	Otago	1,012	495	2,038	2.013834
5	1992	non-fluoridated	Southland	809	359	2,004	2.477132
5	1992	fluoridated	Northland	81	30	226	2.790123
5	1992	fluoridated	Auckland	10,111	5,718	16,937	1.675106
5	1992	fluoridated	Waikato	2,151	1,054	4,367	2.030219
5	1992	fluoridated	Bay of Plenty	1,046	497	2,120	2.026769
5	1992	fluoridated	Tairāwhiti	493	188	1,200	2.434077
5	1992	fluoridated	Hawkes Bay	829	381	1,908	2.301568
5	1992	fluoridated	Taranaki	1,015	551	1,769	1.742857
5	1992	fluoridated	Manawatu-Wanganui	1,053	583	1,853	1.759734
5	1992	fluoridated	Wellington	3,989	2,167	5,381	1.34896
5	1992	fluoridated	Nelson-Marlborough	0	0	0	#DIV/0!
5	1992	fluoridated	West Coast	0	0	0	#DIV/0!
5	1992	fluoridated	Canterbury	185	113	240	1.297297
5	1992	fluoridated	Otago	1,034	611	1,597	1.544487
5	1992	fluoridated	Southland	681	380	965	1.417034
12	1992	non-fluoridated	Northland	2,045	961	3,522	1.722249

12	1992 non-fluoridated	Auckland	2,142	1,102	2,438	1.138189
12	1992 non-fluoridated	Waikato	1,680	706	3,074	1.829762
12	1992 non-fluoridated	Bay of Plenty	2,042	865	3,975	1.946621
12	1992 non-fluoridated	Tairāwhiti	273	127	392	1.435897
12	1992 non-fluoridated	Hawkes Bay	1,485	695	2,401	1.616835
12	1992 non-fluoridated	Taranaki	688	237	1,480	2.151163
12	1992 non-fluoridated	Manawatu-Wanganui	2,260	1,105	3,480	1.539823
12	1992 non-fluoridated	Wellington	296	135	395	1.334459
12	1992 non-fluoridated	Nelson-Marlborough	1,553	738	2,300	1.481005
12	1992 non-fluoridated	West Coast	519	192	1,024	1.973025
12	1992 non-fluoridated	Canterbury	5,497	2,768	7,513	1.366745
12	1992 non-fluoridated	Otago	1,065	350	2,502	2.349296
12	1992 non-fluoridated	Southland	778	290	2,090	2.686375
12	1992 fluoridated	Northland	76	42	95	1.25
12	1992 fluoridated	Auckland	11,288	5,717	14,037	1.243533
12	1992 fluoridated	Waikato	2,127	1,064	3,020	1.41984
12	1992 fluoridated	Bay of Plenty	1,290	650	1,731	1.34186
12	1992 fluoridated	Tairāwhiti	446	252	468	1.049327
12	1992 fluoridated	Hawkes Bay	784	436	868	1.107143
12	1992 fluoridated	Taranaki	1,043	313	1,698	1.627996
12	1992 fluoridated	Manawatu-Wanganui	1,046	473	1,579	1.50956
12	1992 fluoridated	Wellington	4,256	2,080	5,373	1.262453
12	1992 fluoridated	Nelson-Marlborough	0	0	0	#DIV/0!
12	1992 fluoridated	West Coast	0	0	0	#DIV/0!
12	1992 fluoridated	Canterbury	270	104	447	1.655556
12	1992 fluoridated	Otago	1,169	548	1,701	1.45509
12	1992 fluoridated	Southland	898	207	2,235	2.488864
5	1993 non-fluoridated	Northland	2,048	869	5,864	2.863281
5	1993 non-fluoridated	Auckland	2,066	1,085	3,940	1.907067
5	1993 non-fluoridated	Waikato	3,028	1,473	6,628	2.188904
5	1993 non-fluoridated	Bay of Plenty	3,042	1,280	8,747	2.875411
5	1993 non-fluoridated	Tairāwhiti	255	110	557	2.184314
5	1993 non-fluoridated	Hawkes Bay	1,503	681	3,751	2.495675
5	1993 non-fluoridated	Taranaki	763	329	1,837	2.407602
5	1993 non-fluoridated	Manawatu-Wanganui	2,319	1,198	4,729	2.039241
5	1993 non-fluoridated	Wellington	383	162	788	2.057441

Raw_Data

5	1993 non-fluoridated	Nelson-Marlborough	1,483	784	2,680	1.807148
5	1993 non-fluoridated	West Coast	416	155	1,268	3.048077
5	1993 non-fluoridated	Canterbury	5,595	3,082	9,869	1.763896
5	1993 non-fluoridated	Otago	991	503	2,106	2.125126
5	1993 non-fluoridated	Southland	852	414	1,811	2.125587
5	1993 fluoridated	Northland	67	31	193	2.880597
5	1993 fluoridated	Auckland	10,496	6,155	16,358	1.558498
5	1993 fluoridated	Waikato	3,097	1,687	5,407	1.745883
5	1993 fluoridated	Bay of Plenty	208	97	447	2.149038
5	1993 fluoridated	Tairāwhiti	490	205	1,137	2.320408
5	1993 fluoridated	Hawkes Bay	976	448	2,135	2.1875
5	1993 fluoridated	Taranaki	1,003	544	1,693	1.687936
5	1993 fluoridated	Manawatu-Wanganui	1,026	628	1,454	1.417154
5	1993 fluoridated	Wellington	3,695	2,070	5,188	1.40406
5	1993 fluoridated	Nelson-Marlborough	0	0	0	#DIV/0!
5	1993 fluoridated	West Coast	0	0	0	#DIV/0!
5	1993 fluoridated	Canterbury	71	39	103	1.450704
5	1993 fluoridated	Otago	1,109	655	1,764	1.590622
5	1993 fluoridated	Southland	648	377	929	1.433642
12	1993 non-fluoridated	Northland	2,104	1,010	3,286	1.561787
12	1993 non-fluoridated	Auckland	2,177	1,219	2,314	1.062931
12	1993 non-fluoridated	Waikato	1,882	896	2,815	1.495749
12	1993 non-fluoridated	Bay of Plenty	3,259	1,309	6,036	1.852102
12	1993 non-fluoridated	Tairāwhiti	250	138	371	1.484
12	1993 non-fluoridated	Hawkes Bay	1,498	784	2,098	1.400534
12	1993 non-fluoridated	Taranaki	696	228	1,345	1.932471
12	1993 non-fluoridated	Manawatu-Wanganui	2,255	1,183	3,154	1.39867
12	1993 non-fluoridated	Wellington	413	188	572	1.384988
12	1993 non-fluoridated	Nelson-Marlborough	1,628	874	2,119	1.301597
12	1993 non-fluoridated	West Coast	499	232	844	1.691383
12	1993 non-fluoridated	Canterbury	5,136	2,614	6,789	1.321846
12	1993 non-fluoridated	Otago	1,130	391	2,527	2.236283
12	1993 non-fluoridated	Southland	1,002	314	2,417	2.412176
12	1993 fluoridated	Northland	91	48	141	1.549451
12	1993 fluoridated	Auckland	11,606	6,062	13,754	1.185077
12	1993 fluoridated	Waikato	2,343	1,201	3,076	1.312847

Raw_Data

12	1993	fluoridated	Bay of Plenty	340	149	521	1.532353
12	1993	fluoridated	Tairāwhiti	515	229	522	1.013592
12	1993	fluoridated	Hawkes Bay	798	485	712	0.892231
12	1993	fluoridated	Taranaki	1,039	488	1,421	1.367661
12	1993	fluoridated	Manawatu-Wanganui	1,117	520	1,746	1.563115
12	1993	fluoridated	Wellington	4,636	2,477	5,282	1.139344
12	1993	fluoridated	Nelson-Marlborough	0	0	0	#DIV/0!
12	1993	fluoridated	West Coast	0	0	0	#DIV/0!
12	1993	fluoridated	Canterbury	84	48	101	1.202381
12	1993	fluoridated	Otago	1,141	570	1,532	1.342682
12	1993	fluoridated	Southland	724	205	1,607	2.219613
5	1994	non-fluoridated	Northland	2,279	928	6,541	2.870118
5	1994	non-fluoridated	Auckland	2,064	1,103	3,803	1.842539
5	1994	non-fluoridated	Waikato	2,884	1,445	6,201	2.150139
5	1994	non-fluoridated	Bay of Plenty	2,978	1,438	7,683	2.579919
5	1994	non-fluoridated	Tairāwhiti	283	112	671	2.371025
5	1994	non-fluoridated	Hawkes Bay	1,384	649	3,363	2.429913
5	1994	non-fluoridated	Taranaki	691	347	1,382	2
5	1994	non-fluoridated	Manawatu-Wanganui	2,164	1,150	4,292	1.983364
5	1994	non-fluoridated	Wellington	569	295	984	1.72935
5	1994	non-fluoridated	Nelson-Marlborough	1,390	733	2,516	1.810072
5	1994	non-fluoridated	West Coast	413	178	1,251	3.029056
5	1994	non-fluoridated	Canterbury	5,627	2,854	11,817	2.100053
5	1994	non-fluoridated	Otago	1,016	537	1,971	1.939961
5	1994	non-fluoridated	Southland	821	428	1,429	1.74056
5	1994	fluoridated	Northland	84	30	243	2.892857
5	1994	fluoridated	Auckland	11,168	6,806	16,309	1.460333
5	1994	fluoridated	Waikato	2,593	1,465	4,460	1.720015
5	1994	fluoridated	Bay of Plenty	675	337	1,262	1.86963
5	1994	fluoridated	Tairāwhiti	493	216	922	1.870183
5	1994	fluoridated	Hawkes Bay	981	465	2,207	2.249745
5	1994	fluoridated	Taranaki	980	533	1,578	1.610204
5	1994	fluoridated	Manawatu-Wanganui	1,198	715	1,765	1.473289
5	1994	fluoridated	Wellington	4,913	3,186	5,470	1.113373
5	1994	fluoridated	Nelson-Marlborough	0	0	0	#DIV/0!
5	1994	fluoridated	West Coast	0	0	0	#DIV/0!

Raw_Data

5	1994	fluoridated	Canterbury	67	35	119	1.776119
5	1994	fluoridated	Otago	1,102	670	1,521	1.380218
5	1994	fluoridated	Southland	679	418	862	1.269514
12	1994	non-fluoridated	Northland	2,047	1,053	2,948	1.440156
12	1994	non-fluoridated	Auckland	2,204	1,166	2,526	1.146098
12	1994	non-fluoridated	Waikato	3,304	1,748	4,493	1.359867
12	1994	non-fluoridated	Bay of Plenty	3,114	1,260	5,761	1.850032
12	1994	non-fluoridated	Tairāwhiti	276	139	342	1.23913
12	1994	non-fluoridated	Hawkes Bay	1,387	693	2,053	1.480173
12	1994	non-fluoridated	Taranaki	717	255	1,305	1.820084
12	1994	non-fluoridated	Manawatu-Wanganui	2,215	1,179	2,813	1.269977
12	1994	non-fluoridated	Wellington	524	270	610	1.164122
12	1994	non-fluoridated	Nelson-Marlborough	1,596	851	2,043	1.280075
12	1994	non-fluoridated	West Coast	425	200	633	1.489412
12	1994	non-fluoridated	Canterbury	5,264	2,684	7,475	1.420023
12	1994	non-fluoridated	Otago	1,065	372	2,098	1.969953
12	1994	non-fluoridated	Southland	867	290	2,107	2.430219
12	1994	fluoridated	Northland	100	55	125	1.25
12	1994	fluoridated	Auckland	11,602	6,145	13,057	1.125409
12	1994	fluoridated	Waikato	2,958	1,617	3,520	1.189993
12	1994	fluoridated	Bay of Plenty	747	396	807	1.080321
12	1994	fluoridated	Tairāwhiti	483	273	546	1.130435
12	1994	fluoridated	Hawkes Bay	825	487	743	0.900606
12	1994	fluoridated	Taranaki	957	489	1,292	1.350052
12	1994	fluoridated	Manawatu-Wanganui	1,076	475	1,603	1.489777
12	1994	fluoridated	Wellington	4,077	2,246	4,285	1.051018
12	1994	fluoridated	Nelson-Marlborough	0	0	0	#DIV/0!
12	1994	fluoridated	West Coast	0	0	0	#DIV/0!
12	1994	fluoridated	Canterbury	76	42	84	1.105263
12	1994	fluoridated	Otago	1,169	605	1,391	1.189906
12	1994	fluoridated	Southland	733	262	1,356	1.849932
5	1995	non-fluoridated	Northland	2,217	907	6,416	2.894001
5	1995	non-fluoridated	Auckland	2,267	1,252	3,967	1.74989
5	1995	non-fluoridated	Waikato	2,836	1,479	4,979	1.755642
5	1995	non-fluoridated	Bay of Plenty	3,570	1,703	7,347	2.057983
5	1995	non-fluoridated	Tairāwhiti	320	146	671	2.096875

Raw_Data

5	1995 non-fluoridated	Hawkes Bay	1,629	799	3,780	2,320442
5	1995 non-fluoridated	Taranaki	674	356	1,218	1,807122
5	1995 non-fluoridated	Manawatu-Wanganui	2,241	1,154	4,431	1,977242
5	1995 non-fluoridated	Wellington	406	244	521	1,283251
5	1995 non-fluoridated	Nelson-Marlborough	1,639	862	2,956	1,803539
5	1995 non-fluoridated	West Coast	405	174	1,016	2,508642
5	1995 non-fluoridated	Canterbury	4,637	2,450	9,047	1,951046
5	1995 non-fluoridated	Otago	1,127	512	2,016	1,78882
5	1995 non-fluoridated	Southland	882	496	1,495	1,695011
5	1995 fluoridated	Northland	99	32	239	2,414141
5	1995 fluoridated	Auckland	12,389	7,192	18,737	1,51239
5	1995 fluoridated	Waikato	2,581	1,519	3,488	1,351414
5	1995 fluoridated	Bay of Plenty	794	420	1,344	1,692695
5	1995 fluoridated	Tairāwhiti	507	263	791	1,560158
5	1995 fluoridated	Hawkes Bay	815	376	1,809	2,219632
5	1995 fluoridated	Taranaki	1,086	620	1,638	1,508287
5	1995 fluoridated	Manawatu-Wanganui	1,144	656	1,674	1,463287
5	1995 fluoridated	Wellington	4,806	3,112	5,066	1,054099
5	1995 fluoridated	Nelson-Marlborough	0	0	0	#DIV/0!
5	1995 fluoridated	West Coast	0	0	0	#DIV/0!
5	1995 fluoridated	Canterbury	214	117	336	1,570093
5	1995 fluoridated	Otago	1,087	670	1,625	1,49494
5	1995 fluoridated	Southland	623	396	698	1,120385
12	1995 non-fluoridated	Northland	2,106	981	3,370	1,60019
12	1995 non-fluoridated	Auckland	1,938	920	2,535	1,30805
12	1995 non-fluoridated	Waikato	3,224	1,645	4,379	1,358251
12	1995 non-fluoridated	Bay of Plenty	3,363	1,312	5,961	1,772525
12	1995 non-fluoridated	Tairāwhiti	237	126	448	1,890295
12	1995 non-fluoridated	Hawkes Bay	1,385	660	2,102	1,51769
12	1995 non-fluoridated	Taranaki	671	254	1,128	1,681073
12	1995 non-fluoridated	Manawatu-Wanganui	2,133	1,070	2,985	1,399437
12	1995 non-fluoridated	Wellington	437	229	535	1,224256
12	1995 non-fluoridated	Nelson-Marlborough	1,646	832	2,143	1,301944
12	1995 non-fluoridated	West Coast	377	154	608	1,612732
12	1995 non-fluoridated	Canterbury	4,884	2,273	7,228	1,479934
12	1995 non-fluoridated	Otago	1,059	352	2,248	2,122757

Raw_Data

12	1995 non-fluoridated	Southland	856	287	1,830	2.13785
12	1995 fluoridated	Northland	113	52	118	1.044248
12	1995 fluoridated	Auckland	11,528	6,005	13,754	1.193095
12	1995 fluoridated	Waikato	2,983	1,533	3,647	1.222595
12	1995 fluoridated	Bay of Plenty	636	328	837	1.316038
12	1995 fluoridated	Tairāwhiti	564	308	743	1.317376
12	1995 fluoridated	Hawkes Bay	857	470	905	1.056009
12	1995 fluoridated	Taranaki	1,055	429	1,582	1.499526
12	1995 fluoridated	Manawatu-Wanganui	1,093	457	1,889	1.728271
12	1995 fluoridated	Wellington	4,519	2,290	5,197	1.150033
12	1995 fluoridated	Nelson-Marlborough	0	0	0	#DIV/0!
12	1995 fluoridated	West Coast	0	0	0	#DIV/0!
12	1995 fluoridated	Canterbury	233	78	449	1.927039
12	1995 fluoridated	Otago	1,154	641	1,618	1.40208
12	1995 fluoridated	Southland	753	289	1,370	1.819389
5	1996 non-fluoridated	Northland	1,723	750	4,564	2.6489
5	1996 non-fluoridated	Auckland	1,966	946	2,975	1.5132
5	1996 non-fluoridated	Waikato	3,202	1,787	5,350	1.6708
5	1996 non-fluoridated	Bay of Plenty	3,677	1,720	7,656	2.0821
5	1996 non-fluoridated	Tairāwhiti	228	55	573	2.5132
5	1996 non-fluoridated	Hawkes Bay	1,528	688	3,966	2.5955
5	1996 non-fluoridated	Taranaki	602	288	1,369	2.2741
5	1996 non-fluoridated	Manawatu-Wanganui	2,081	1,127	2,524	1.2129
5	1996 non-fluoridated	Wellington	368	231	471	1.2799
5	1996 non-fluoridated	Nelson-Marlborough	1,629	907	3,019	1.8533
5	1996 non-fluoridated	West Coast	519	220	1,325	2.553
5	1996 non-fluoridated	Canterbury	5,183	2,841	9,337	1.8015
5	1996 non-fluoridated	Otago	1,106	605	2,010	1.8174
5	1996 non-fluoridated	Southland	800	538	1,356	1.695
5	1996 fluoridated	Northland	74	26	207	2.7973
5	1996 fluoridated	Auckland	10,219	5,786	13,762	1.3467
5	1996 fluoridated	Waikato	2,560	1,554	3,299	1.2887

5	1996 fluoridated	Bay of Plenty	636	320	1,068	1.6792
5	1996 fluoridated	Tairāwhiti	461	233	639	1.3861
5	1996 fluoridated	Hawkes Bay	1,050	503	2,292	2.1829
5	1996 fluoridated	Taranaki	1,044	574	1,748	1.6743
5	1996 fluoridated	Manawatu-Wanganui	1,134	628	522	0.4603
5	1996 fluoridated	Wellington	3,636	2,320	3,919	1.0778
5	1996 fluoridated	Nelson-Marlborough	0	0	0	#DIV/0!
5	1996 fluoridated	West Coast	0	0	0	#DIV/0!
5	1996 fluoridated	Canterbury	251	161	262	1.0438
5	1996 fluoridated	Otago	1,052	627	1,374	1.3061
5	1996 fluoridated	Southland	669	451	740	1.1061
12	1996 non-fluoridated	Northland	2,156	860	4,100	1.9017
12	1996 non-fluoridated	Auckland	1,949	687	1,991	1.0215
12	1996 non-fluoridated	Waikato	4,589	2,195	6,576	1.433
12	1996 non-fluoridated	Bay of Plenty	3,190	1,149	6,514	2.042
12	1996 non-fluoridated	Tairāwhiti	293	116	557	1.901
12	1996 non-fluoridated	Hawkes Bay	1,406	642	2,212	1.5733
12	1996 non-fluoridated	Taranaki	615	176	1,347	2.1902
12	1996 non-fluoridated	Manawatu-Wanganui	2,139	971	2,185	1.0215
12	1996 non-fluoridated	Wellington	382	192	466	1.2199
12	1996 non-fluoridated	Nelson-Marlborough	1,610	812	2,082	1.2932
12	1996 non-fluoridated	West Coast	475	190	908	1.9116
12	1996 non-fluoridated	Canterbury	5,657	2,331	10,034	1.7737
12	1996 non-fluoridated	Otago	1,014	320	2,132	2.1026
12	1996 non-fluoridated	Southland	880	283	1,976	2.2455
12	1996 fluoridated	Northland	61	32	85	1.3934
12	1996 fluoridated	Auckland	10,785	4,249	11,105	1.0297
12	1996 fluoridated	Waikato	3,548	1,785	4,761	1.3419
12	1996 fluoridated	Bay of Plenty	497	234	676	1.3602

12	1996	fluoridated	Tairāwhiti	462	180	717	1.5519
12	1996	fluoridated	Hawkes Bay	767	381	953	1.2425
12	1996	fluoridated	Taranaki	982	365	1,674	1.7047
12	1996	fluoridated	Manawatu-Wanganui	1,074	373	710	0.6611
12	1996	fluoridated	Wellington	4,086	2,028	4,892	1.1973
12	1996	fluoridated	Nelson-Marlborough	0	0	0	#DIV/0!
12	1996	fluoridated	West Coast	0	0	0	#DIV/0!
12	1996	fluoridated	Canterbury	262	78	612	2.3359
12	1996	fluoridated	Otago	1,054	438	1,622	1.5389
12	1996	fluoridated	Southland	660	247	1,243	1.883333
5	1997	non-fluoridated	Northland	2,288	956	6,526	2.852273
5	1997	non-fluoridated	Auckland	1,564	867	2,882	1.842711
5	1997	non-fluoridated	Waikato	2,585	1,427	4,446	1.719923
5	1997	non-fluoridated	Bay of Plenty	3,191	1,585	6,956	2.179881
5	1997	non-fluoridated	Tairāwhiti	251	150	633	2.521912
5	1997	non-fluoridated	Hawkes Bay	1,553	750	3,626	2.334836
5	1997	non-fluoridated	Taranaki	593	277	1,456	2.455312
5	1997	non-fluoridated	Manawatu-Wanganui	1,776	864	3,830	2.156532
5	1997	non-fluoridated	Wellington	394	223	649	1.647208
5	1997	non-fluoridated	Nelson-Marlborough	1,650	882	3,058	1.853333
5	1997	non-fluoridated	West Coast	598	219	1,656	2.769231
5	1997	non-fluoridated	Canterbury	5,859	3,174	10,360	1.76822
5	1997	non-fluoridated	Otago	1,057	575	1,886	1.784295
5	1997	non-fluoridated	Southland	813	486	1,390	1.709717
5	1997	fluoridated	Northland	106	43	328	3.09434
5	1997	fluoridated	Auckland	10,733	6,621	15,424	1.437063
5	1997	fluoridated	Waikato	1,875	1,184	2,227	1.187733
5	1997	fluoridated	Bay of Plenty	530	301	800	1.509434
5	1997	fluoridated	Tairāwhiti	463	264	955	2.062635
5	1997	fluoridated	Hawkes Bay	851	444	1,632	1.917744
5	1997	fluoridated	Taranaki	1,000	606	1,406	1.406
5	1997	fluoridated	Manawatu-Wanganui	1,117	665	1,661	1.487019
5	1997	fluoridated	Wellington	3,445	2,347	3,259	0.946009
5	1997	fluoridated	Nelson-Marlborough	0	0	0	#DIV/0!

Raw_Data

5	1997	fluoridated	West Coast	0	0	0	#DIV/0!
5	1997	fluoridated	Canterbury	202	125	256	1.267327
5	1997	fluoridated	Otago	1,060	657	1,500	1.415094
5	1997	fluoridated	Southeast	610	399	723	1.185246
12	1997	non-fluoridated	Northland	2,216	903	4,540	2.048736
12	1997	non-fluoridated	Auckland	1,675	808	2,422	1.44597
12	1997	non-fluoridated	Waikato	2,724	1,314	3,958	1.45301
12	1997	non-fluoridated	Bay of Plenty	3,363	1,102	6,645	1.975914
12	1997	non-fluoridated	Tairāwhiti	251	97	525	2.091633
12	1997	non-fluoridated	Hawkes Bay	1,342	642	1,994	1.485842
12	1997	non-fluoridated	Taranaki	673	210	1,505	2.236256
12	1997	non-fluoridated	Manawatu-Wanganui	1,944	854	3,403	1.750514
12	1997	non-fluoridated	Wellington	386	208	458	1.186528
12	1997	non-fluoridated	Nelson-Marlborough	1,673	787	3,231	1.931261
12	1997	non-fluoridated	West Coast	580	240	989	1.705172
12	1997	non-fluoridated	Canterbury	5,087	2,088	9,366	1.841164
12	1997	non-fluoridated	Otago	1,035	358	2,175	2.101449
12	1997	non-fluoridated	Southeast	798	246	1,857	2.327068
12	1997	fluoridated	Northland	95	48	145	1.526316
12	1997	fluoridated	Auckland	11,275	5,519	15,179	1.346253
12	1997	fluoridated	Waikato	2,020	1,074	2,464	1.219802
12	1997	fluoridated	Bay of Plenty	584	202	984	1.684932
12	1997	fluoridated	Tairāwhiti	444	188	943	2.123874
12	1997	fluoridated	Hawkes Bay	815	369	1,162	1.425767
12	1997	fluoridated	Taranaki	1,072	417	1,801	1.680037
12	1997	fluoridated	Manawatu-Wanganui	1,217	425	2,590	2.128184
12	1997	fluoridated	Wellington	3,438	1,839	3,784	1.10064
12	1997	fluoridated	Nelson-Marlborough	0	0	0	#DIV/0!
12	1997	fluoridated	West Coast	0	0	0	#DIV/0!
12	1997	fluoridated	Canterbury	217	58	584	2.691244
12	1997	fluoridated	Otago	1,201	488	1,958	1.630308
12	1997	fluoridated	Southeast	723	259	1,426	1.972337
5	1998	non-fluoridated	Northland	2,029	819	5,937	2.926072
5	1998	non-fluoridated	Auckland	1,812	1,049	3,170	1.749448
5	1998	non-fluoridated	Waikato	2,458	1,290	4,417	1.796989
5	1998	non-fluoridated	Bay of Plenty	3,668	1,671	7,793	2.124591

Raw_Data

5	1998 non-fluoridated	Tairarwhiti	228	84	525	2.302632
5	1998 non-fluoridated	Hawkes Bay	1,384	655	3,142	2.270231
5	1998 non-fluoridated	Taranaki	631	265	1,527	2.419968
5	1998 non-fluoridated	Manawatu-Wanganui	1,829	906	4,077	2.229087
5	1998 non-fluoridated	Wellington	379	208	669	1.765172
5	1998 non-fluoridated	Nelson-Marlborough	1,593	822	3,026	1.899561
5	1998 non-fluoridated	West Coast	515	229	1,296	2.516505
5	1998 non-fluoridated	Canterbury	5,394	3,013	9,348	1.733037
5	1998 non-fluoridated	Otago	1,058	603	1,843	1.741966
5	1998 non-fluoridated	Southland	797	340	1,500	1.882058
5	1998 fluoridated	Northland	78	28	321	4.115385
5	1998 fluoridated	Auckland	11,061	6,582	16,749	1.514239
5	1998 fluoridated	Waikato	1,923	1,132	2,796	1.453978
5	1998 fluoridated	Bay of Plenty	635	331	1,066	1.67874
5	1998 fluoridated	Tairarwhiti	410	184	769	1.87561
5	1998 fluoridated	Hawkes Bay	868	398	1,759	2.026498
5	1998 fluoridated	Taranaki	973	541	1,614	1.658787
5	1998 fluoridated	Manawatu-Wanganui	1,074	639	1,626	1.513966
5	1998 fluoridated	Wellington	4,117	2,659	4,703	1.142337
5	1998 fluoridated	Nelson-Marlborough	0	0	0	#DIV/0!
5	1998 fluoridated	West Coast	0	0	0	#DIV/0!
5	1998 fluoridated	Canterbury	197	124	251	1.274112
5	1998 fluoridated	Otago	966	643	1,093	1.13147
5	1998 fluoridated	Southland	657	408	739	1.12481
12	1998 non-fluoridated	Northland	2,230	828	4,346	1.948879
12	1998 non-fluoridated	Auckland	1,844	827	2,683	1.454989
12	1998 non-fluoridated	Waikato	2,933	1,352	4,641	1.582339
12	1998 non-fluoridated	Bay of Plenty	3,361	1,215	7,148	2.126748
12	1998 non-fluoridated	Tairarwhiti	242	97	473	1.954545
12	1998 non-fluoridated	Hawkes Bay	1,401	630	2,188	1.561742
12	1998 non-fluoridated	Taranaki	671	169	1,589	2.368107
12	1998 non-fluoridated	Manawatu-Wanganui	2,086	856	3,886	1.862895
12	1998 non-fluoridated	Wellington	378	195	477	1.261905
12	1998 non-fluoridated	Nelson-Marlborough	1,792	878	2,399	1.338728
12	1998 non-fluoridated	West Coast	552	210	1,107	2.005435
12	1998 non-fluoridated	Canterbury	4,875	1,875	8,713	1.787282

12	1998 non-fluoridated	Otago	1,181	376	2,563	2,170,195
12	1998 non-fluoridated	Southland	873	298	1,901	2,177,549
12	1998 fluoridated	Northland	152	60	198	1,302,632
12	1998 fluoridated	Auckland	11,770	5,759	15,359	1,304,928
12	1998 fluoridated	Waikato	2,806	1,350	3,842	1,369,209
12	1998 fluoridated	Bay of Plenty	603	212	1,174	1,946,932
12	1998 fluoridated	Tairāwhiti	516	189	948	1,837,209
12	1998 fluoridated	Hawkes Bay	910	429	1,230	1,351,648
12	1998 fluoridated	Taranaki	1,056	363	1,948	1,844,697
12	1998 fluoridated	Manawatu-Wanganui	1,157	452	2,281	1,971,478
12	1998 fluoridated	Wellington	3,749	2,102	3,683	0.982395
12	1998 fluoridated	Nelson-Marlborough	0	0	0	#DIV/0!
12	1998 fluoridated	West Coast	0	0	0	#DIV/0!
12	1998 fluoridated	Canterbury	187	59	380	2,032,086
12	1998 fluoridated	Otago	1,061	486	1,578	1,487,276
12	1998 fluoridated	Southland	681	262	1,165	1,710,72
5	1999 non-fluoridated	Northland	1,707	750	4,895	2,867,604
5	1999 non-fluoridated	Auckland	1,862	1,080	3,126	1,678,84
5	1999 non-fluoridated	Waikato	2,303	1,000	4,345	1,886,67
5	1999 non-fluoridated	Bay of Plenty	3,628	1,510	8,334	2,297,133
5	1999 non-fluoridated	Tairāwhiti	208	82	465	2,235,577
5	1999 non-fluoridated	Hawkes Bay	1,347	585	3,321	2,465,479
5	1999 non-fluoridated	Taranaki	560	222	1,404	2,507,143
5	1999 non-fluoridated	Manawatu-Wanganui	1,996	913	4,771	2,390,281
5	1999 non-fluoridated	Wellington	297	157	489	1,646,465
5	1999 non-fluoridated	Nelson-Marlborough	1,493	767	2,988	2,001,34
5	1999 non-fluoridated	West Coast	450	169	1,267	2,815,556
5	1999 non-fluoridated	Canterbury	5,493	2,893	10,287	1,872,747
5	1999 non-fluoridated	Otago	1,057	587	1,792	1,695,364
5	1999 non-fluoridated	Southland	759	402	1,494	1,968,379
5	1999 fluoridated	Northland	92	37	290	3,152,174
5	1999 fluoridated	Auckland	10,588	6,550	15,702	1,483
5	1999 fluoridated	Waikato	2,162	1,109	3,396	1,570,768
5	1999 fluoridated	Bay of Plenty	794	411	1,258	1,584,383
5	1999 fluoridated	Tairāwhiti	438	208	893	2,038,813
5	1999 fluoridated	Hawkes Bay	864	364	1,970	2,280,093

Raw_Data

5	1999	fluoridated	Taranaki	978	545	1,559	1,59407
5	1999	fluoridated	Manawatu-Wanganui	1,147	647	1,946	1,6966
5	1999	fluoridated	Wellington	3,682	2,417	3,665	0.995383
5	1999	fluoridated	Nelson-Marlborough	1	1	0	0
5	1999	fluoridated	West Coast	0	0	0	#DIV/0!
5	1999	fluoridated	Canterbury	224	118	392	1.75
5	1999	fluoridated	Otago	972	624	1,207	1,24177
5	1999	fluoridated	Southland	566	313	887	1,567138
12	1999	non-fluoridated	Northland	2,004	821	3,783	1,887725
12	1999	non-fluoridated	Auckland	1,844	876	2,525	1,369306
12	1999	non-fluoridated	Waikato	2,331	1,001	3,506	1,504076
12	1999	non-fluoridated	Bay of Plenty	3,370	1,241	7,074	2,09911
12	1999	non-fluoridated	Tairāwhiti	225	70	483	2,146667
12	1999	non-fluoridated	Hawkes Bay	1,436	608	2,412	1,679666
12	1999	non-fluoridated	Taranaki	665	208	1,372	2,063158
12	1999	non-fluoridated	Manawatu-Wanganui	2,165	850	4,124	1,90485
12	1999	non-fluoridated	Wellington	354	176	477	1,347458
12	1999	non-fluoridated	Nelson-Marlborough	1,814	869	2,419	1,333517
12	1999	non-fluoridated	West Coast	470	170	945	2,010638
12	1999	non-fluoridated	Canterbury	5,239	1,935	9,429	1,799771
12	1999	non-fluoridated	Otago	1,037	349	2,163	2,085824
12	1999	non-fluoridated	Southland	842	266	1,986	2,35867
12	1999	fluoridated	Northland	99	43	156	1,575758
12	1999	fluoridated	Auckland	12,153	6,114	15,978	1,314737
12	1999	fluoridated	Waikato	2,456	1,216	3,161	1,287052
12	1999	fluoridated	Bay of Plenty	623	224	1,094	1,756019
12	1999	fluoridated	Tairāwhiti	479	225	790	1,649269
12	1999	fluoridated	Hawkes Bay	825	347	1,346	1,631515
12	1999	fluoridated	Taranaki	991	357	1,710	1,72553
12	1999	fluoridated	Manawatu-Wanganui	1,246	463	2,357	1,891653
12	1999	fluoridated	Wellington	3,671	2,005	3,855	1,050123
12	1999	fluoridated	Nelson-Marlborough	1	1	0	0
12	1999	fluoridated	West Coast	0	0	0	#DIV/0!
12	1999	fluoridated	Canterbury	204	79	364	1,784314
12	1999	fluoridated	Otago	1,063	482	1,551	1,459078
12	1999	fluoridated	Southland	731	266	1,323	1,80985

1996 MOH data 5year olds

2.8

2.1

1.4

0.7

0.0

dmft

UNFLUORIDATED 5
FLUORIDATED 5



REGION
northland
auckland
waikato
bop
tararangi
hawkes bay
Taranaki
manawatu-wanganui
wellington
nelson-marlborough
west coast
canterbury
otago
southland

THIS is the Exhibit marked with the letter... B... referred to in the annexed affidavit of STAMOUKIS LITRAS SWORN at Wellington this 4th day of November 2013 before me:
Amner
A Solicitor of the High Court of New Zealand
Barriester

B¹

THIS is the Exhibit marked with the letter. **C** referred to in the annexed affidavit of **STANISLUS LITAS** SWORN at **Wellington** this **4th** day of **November** 2013 before me:

James Barrie
A Solicitor of the High Court of New Zealand

1996 MOH data 12Year olds VERIFIED

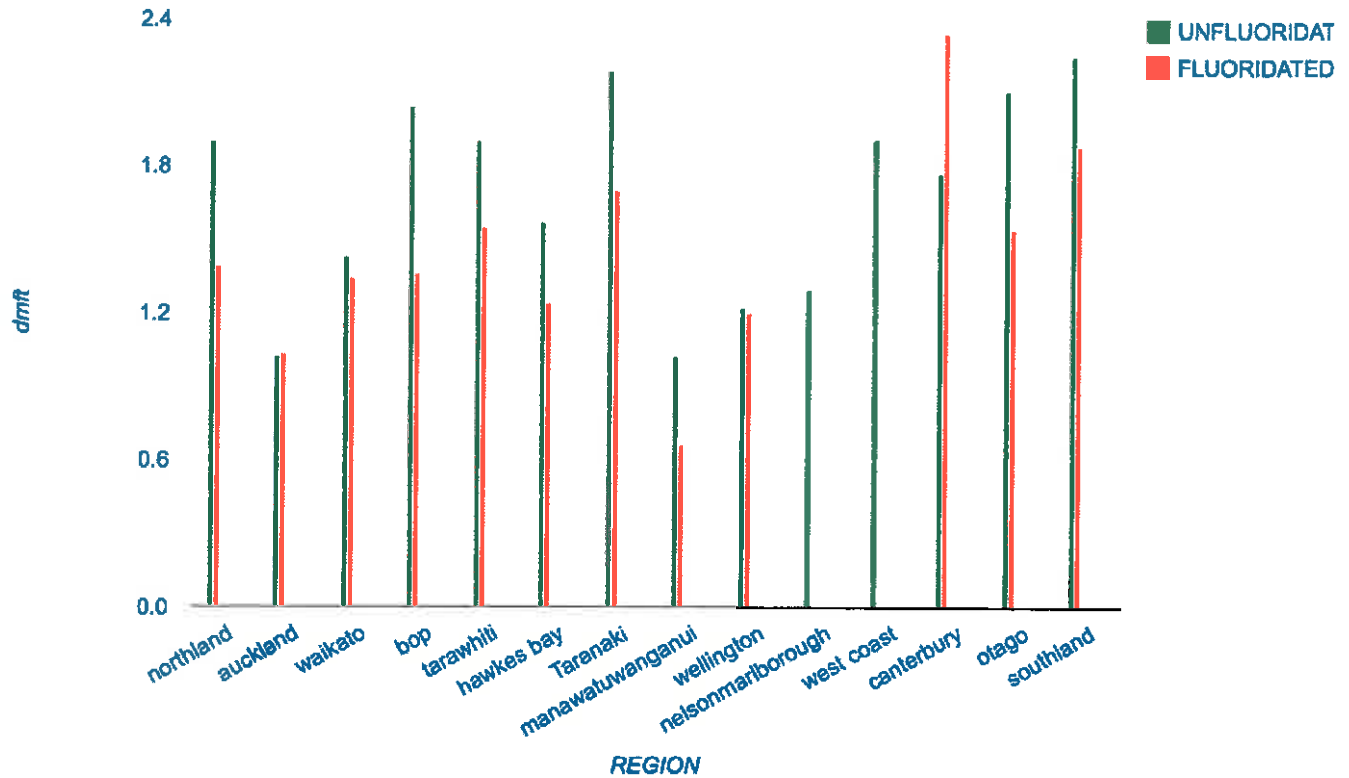


Chart Data

REGION	UNFLUORIDATED	FLUORIDATED
northland	1.9	1.39
auckland	1.02	1.03
waikato	1.43	1.34
bop	2.04	1.36
tarawhiti	1.9	1.55
hawkes bay	1.57	1.24
Taranaki	2.19	1.7
manawatu...	1.02	.66
wellington	1.22	1.2
nelsonmarl...	1.29	0
REGION	UNFLUORIDATED	FLUORIDATED
west coast	1.91	0
canterbury	1.77	2.34
otago	2.1	1.54
southland	2.25	1.88

Table C2: Sample size numbers and design effects (DEFFs) for children and adolescents aged 2–17 years, for the 2009 New Zealand Oral Health Survey, by demographic group

Children and adolescents (2–17 years)	Population size	Numbers interviewed	Numbers dentally examined	Example design effects (DEFFs)		
				Fair or poor oral health status	Brush teeth twice daily with adult strength fluoride toothpaste	DMFT
All	900,000	1431	987	3.4	3.4	2.4
Females	430,000	693	474	2.9	2.4	1.8
Males	470,000	738	513	3.0	3.2	2.8
2–4 years	150,000	280	195	0.9	2.8	2.0
5–11 years	390,000	642	438	3.3	3.4	2.5
12–17 years	360,000	509	354	2.8	3.2	2.3
Māori	200,000	694	461	1.6	1.5	1.6
Pacific	100,000	269	184	1.8	1.6	2.1
Asian	70,000	237	171	4.0	3.7	1.7
European/Other	700,000	817	570	2.6	3.1	2.4
NZDep2006 quintile 1	180,000	182	118	2.9	2.5	2.6
NZDep2006 quintile 2	180,000	225	167	2.1	3.0	2.4
NZDep2006 quintile 3	190,000	266	187	3.2	3.1	3.3
NZDep2006 quintile 4	160,000	323	217	3.6	3.3	2.5
NZDep2006 quintile 5	180,000	435	298	2.0	1.7	1.6

Table C3: Sample size numbers and design effects (DEFFs) for adults aged 18 years and over, for the 2009 New Zealand Oral Health Survey, by demographic group

Adults (18+ years)	Population size	Numbers interviewed	Numbers dentally examined	Numbers periodontally examined	Example design effects (DEFFs)		
					Fair or poor oral health status	Usually visit dentist for check-up	DMFT
All	2,930,000	3475	2209	2048	2.0	2.1	0.8
Females	1,530,000	2110	1355	1265	1.7	1.8	0.9
Males	1,400,000	1365	854	783	2.2	2.3	0.7
18–24 years	360,000	268	168	163	2.2	3.2	2.1
25–34 years	460,000	549	364	352	1.8	2.8	2.0
35–44 years	570,000	783	578	560	2.2	2.2	2.4
45–54 years	550,000	687	464	433	2.1	2.3	2.1
55–64 years	440,000	510	303	269	2.0	1.7	1.5
65–74 years	290,000	375	202	176	1.7	1.2	1.1
75+ years	240,000	303	130	95	1.6	1.6	1.6
Māori	330,000	1267	781	723	2.1	2.0	1.5
Pacific	150,000	353	219	209	1.4	1.9	1.3
Asian	250,000	518	380	363	2.6	3.3	2.2
European/Other	2,430,000	2125	1353	1248	1.8	1.5	1.1
NZDep2006 quintile 1	610,000	519	340	316	1.8	1.9	2.5
NZDep2006 quintile 2	600,000	599	418	389	1.8	2.0	2.1
NZDep2006 quintile 3	570,000	639	415	396	2.0	2.7	2.4
NZDep2006 quintile 4	590,000	787	483	446	1.9	2.5	2.7
NZDep2006 quintile 5	570,000	931	553	501	2.6	3.1	2.7

THIS is the Exhibit marked with the letter... referred to in the annexed affidavit of STAMONIS LITRAI SWORN at Wellington this 1st day of November 2013 before me:

James
A Solicitor of the High Court of New Zealand
Barrie

Table 1: Dental health status of five-year-old children 2011

TOTAL																				
DHB Region	Total					Fluoridated					Non-fluoridated									
	Number	No. of children caries free	% caries free	No. of decayed, missing & filled teeth	mean dmft	Number	No. of children caries free	% caries free	No. of decayed, missing & filled teeth	Mean dmft	Number	No. of children caries free	% caries free	No. of decayed, missing & filled teeth	Mean dmft					
Northland	1,112	392	35.25	3943	3.55	-	0	n/a	0	n/a	1,112	392	35.25	3943	3.55					
Waitemata	5,524	3,594	65.06	7944	1.44	5,024	3,291	65.51	7104	1.41	500	303	60.60	840	1.68					
Auckland	4,114	2,535	61.62	6976	1.70	3,874	2,402	62.00	6459	1.67	240	133	55.42	517	2.15					
Counties Manukau	5,978	2,845	47.59	14891	2.49	5,525	2,580	46.70	14061	2.54	453	265	58.50	830	1.83					
Northern region providers	16,728	9,366	55.99	33,754	2.62	14,423	8,273	57.36	27,624	1.92	2,345	1,093	47.42	6,130	2.66					
Waikato	3,689	2,246	60.88	8113	2.20	1,830	1,054	57.60	4191	2.29	1,859	1,192	64.12	3922	2.11					
Lakes	1,176	690	58.67	3153	2.68	297	141	47.47	545	1.84	879	549	62.46	2608	2.97					
Bay of Plenty	1,659	830	50.03	3963	2.39	79	52	65.82	134	1.70	1,580	778	49.24	3829	2.42					
Tairāwhiti	734	305	41.55	2284	3.11	539	230	42.67	1676	3.11	195	75	38.46	608	3.12					
Taranaki	1,499	842	56.17	2942	1.96	1,050	608	57.90	2007	1.91	449	234	52.12	935	2.08					
Midland region providers	8,757	4,913	56.10	20,455	2.34	3,795	2,085	54.94	8,353	2.25	4,962	2,828	56.99	11,902	2.40					
Hawkes Bay	1,714	925	53.97	3082	1.80	840	461	54.88	1488	1.77	874	464	53.09	1594	1.82					
Midcentral	1,796	1,076	59.91	2846	1.58	1,087	683	62.83	1447	1.33	709	393	55.43	1399	1.97					
Whanganui	847	449	53.01	1659	1.96	-	0	n/a	0	n/a	847	449	53.01	1659	1.96					
Hutt Valley	1,420	857	60.35	2250	1.58	1,348	822	60.98	2096	1.55	72	35	48.61	154	2.14					
Capital & Coast	2,649	1,973	74.48	2585	0.98	2,633	1,961	74.48	2574	0.98	16	12	75.00	11	0.68					
Wairarapa	431	289	67.05	560	1.30	215	139	64.65	295	1.37	216	150	69.44	265	1.23					
Central region providers	8,857	5,569	62.88	12,982	1.47	5,123	4,066	66.41	7,900	1.29	2,734	1,503	54.97	5,082	1.86					
Nelson-Marlborough	1,435	966	67.32	1862	1.30	-	0	n/a	0	n/a	1,435	966	67.32	1862	1.30					
West Coast	488	298	61.07	911	1.87	-	0	n/a	0	n/a	488	298	61.07	911	1.87					
Canterbury	4,810	3,062	63.66	7167	1.49	65	35	53.85	125	1.92	4,745	3,027	63.79	7042	1.48					
South Canterbury	618	359	58.09	1036	1.68	-	0	n/a	0	n/a	618	359	58.09	1036	1.68					
Southern DHB	2,960	2,081	70.30	3142	1.06	1,443	1,027	71.17	1454	1.01	1,517	1,054	69.48	1688	1.11					
Southern region providers	18,311	8,786	65.62	14,118	1.37	1,508	1,062	70.42	1,579	1.03	8,803	5,704	64.80	12,339	1.42					
New Zealand	44,653	26,614	59.60	81,309	1.62	25,849	15,486	59.91	45,636	1.77	18,804	11,128	59.18	36,653	1.90					

THIS is the Exhibit marked with the letter **E** referred to in the annexed affidavit of **STAMOULIS LITRA** SWORN at **Wellington** this **4th** day of **November** 2013 before me:

A Solicitor of the High Court of New Zealand

MAORI

MAORI																			
Maori - Fluoridated					Maori Non-Fluoridated					Maori									
Number	No. of children caries free	% caries free	No. of decayed, missing & filled teeth	Mean dmft	Number	No. of children caries free	% caries free	No. of decayed, missing & filled teeth	Mean dmft	Number	No. of children caries free	% caries free	No. of decayed, missing & filled teeth	Mean dmft	Number	No. of children caries free	% caries free	No. of decayed, missing & filled teeth	Mean dmft
0	0	n/a	0	n/a	573	116	20.24	2,879	5.02	573	116	20.24	2,879	5.02	786	402	51.15	1,728	2.20
707	368	52.05	1,505	2.13	79	34	43.04	223	2.82	786	402	51.15	1,728	2.20	1,491	763	51.19	3,985	2.65
491	263	53.56	871	1.77	41	17	41.46	114	2.78	532	280	52.63	985	1.85	1,491	763	51.19	3,985	2.65
1,455	564	38.76	4,203	2.89	107	36	33.64	378	3.53	1,562	800	38.41	4,581	2.93	1,455	564	38.76	4,203	2.89
2,653	1,195	45.04	6,579	2.48	808	203	25.38	3,594	4.49	2,653	1,195	45.04	6,579	2.48	2,653	1,195	45.04	6,579	2.48
637	206	32.34	2,124	3.33	553	286	51.72	1,952	3.53	1,190	492	41.34	4,076	3.43	637	206	32.34	2,124	3.33
150	46	30.67	407	2.71	455	264	58.02	1,908	4.19	605	310	51.24	2,315	3.83	150	46	30.67	407	2.71
35	15	42.86	103	2.94	533	163	30.58	2,048	3.84	568	178	31.34	2,151	3.79	35	15	42.86	103	2.94
367	121	32.97	1,360	3.71	138	31	22.46	565	4.09	505	152	30.10	1,925	3.81	367	121	32.97	1,360	3.71
247	88	35.63	909	3.68	95	29	30.53	324	3.41	342	117	34.21	1,233	3.61	247	88	35.63	909	3.68
1,436	476	33.15	4,903	3.41	1,774	773	43.57	6,797	3.83	3,210	1,249	38.91	11,700	3.64	1,436	476	33.15	4,903	3.41
311	110	35.37	866	2.78	322	112	34.78	924	2.87	633	222	35.07	1,790	2.83	311	110	35.37	866	2.78
237	111	46.84	499	2.11	176	67	38.07	551	3.13	413	178	43.10	1,050	2.54	237	111	46.84	499	2.11
0	0	n/a	0	n/a	289	90	31.14	889	3.08	413	178	43.10	1,050	2.54	0	0	n/a	0	n/a
165	62	37.58	503	3.05	8	1	12.50	51	6.38	173	63	36.42	554	3.20	165	62	37.58	503	3.05
346	194	56.07	657	1.90	3	1	33.33	6	2.00	349	195	55.87	663	1.90	346	194	56.07	657	1.90
88	53	60.23	168	1.91	41	21	51.22	92	2.24	129	74	57.36	280	2.02	88	53	60.23	168	1.91
1,147	530	46.21	2,693	2.35	838	282	34.80	2,513	3.00	1,986	822	41.39	5,206	2.62	1,147	530	46.21	2,693	2.35
0	0	n/a	0	n/a	210	105	50.00	504	2.40	210	105	50.00	504	2.40	0	0	n/a	0	n/a
0	0	n/a	0	n/a	81	38	46.91	229	2.83	81	38	46.91	229	2.83	0	0	n/a	0	n/a
6	1	16.67	27	4.50	475	218	45.89	1,146	2.41	481	219	30.88	1,173	2.44	6	1	16.67	27	4.50
0	0	n/a	0	n/a	68	21	30.88	227	3.34	68	21	30.88	227	3.34	0	0	n/a	0	n/a
230	129	56.09	352	1.53	150	78	52.00	254	1.69	380	207	54.47	606	1.59	230	129	56.09	352	1.53
234	130	55.08	379	1.61	984	468	46.75	2,381	2.40	1,226	590	48.36	2,739	2.26	234	130	55.08	379	1.61
5,472	2,331	42.60	14,554	2.66	4,397	1,728	39.30	15,264	3.47	9869	4059	41.13	23,818	3.02	5,472	2,331	42.60	14,554	2.66

PACIFIC

Pacific Island - Fluoridated					Pacific Island Non-Fluoridated					Pacific Island				
Number	No. of children caries free	% caries free	No. of decayed, missing & filled teeth	Mean dmft	Number	No. of children caries free	% caries free	No. of decayed, missing & filled teeth	Mean dmft	Number	No. of children caries free	% caries free	No. of decayed, missing & filled teeth	Mean dmft
0	0	n/a	0	n/a	0	0	n/a	0	n/a	0	0	n/a	0	n/a
528	229	43.37	1,456	2.76	24	7	29.17	106	4.42	552	236	42.75	1,562	2.83
879	310	36.27	3,040	3.46	48	13	27.08	197	4.10	927	323	34.84	3,237	3.49
1,800	580	32.22	6,440	3.58	21	6	28.57	82	3.90	1,821	586	32.18	6,522	3.58
3,207	1,119	34.89	10,536	3.41	93	26	27.96	385	4.14	3,300	1,145	34.72	11,321	3.43
60	33	55.00	263	4.38	16	6	37.50	62	3.88	76	39	51.32	325	4.28
11	2	18.18	50	4.55	11	2	18.18	54	4.91	22	4	18.18	104	4.73
0	0	n/a	0	n/a	41	15	36.59	137	3.34	41	15	36.59	137	3.34
15	5	33.33	78	5.20	1	1	100.00	0	0.00	16	6	37.50	78	4.88
16	6	37.50	38	2.38	4	2	50.00	14	3.50	20	8	40.00	52	2.60
182	46	45.10	420	4.21	73	26	35.62	267	3.66	175	72	41.14	696	3.98
69	28	40.58	203	2.94	29	11	37.93	63	2.17	98	39	39.80	266	2.71
43	13	30.23	143	3.33	25	10	40.00	73	2.92	68	23	33.82	216	3.18
0	0	n/a	0	n/a	19	5	26.32	74	3.89	19	5	26.32	74	3.89
152	48	31.58	477	3.14	5	1	20.00	17	3.40	157	49	31.21	494	3.15
249	102	40.96	773	3.10	0	0	n/a	0	n/a	249	102	40.96	773	3.10
13	2	15.38	56	4.31	4	3	75.00	2	0.50	17	5	29.41	58	3.41
526	193	36.69	1,652	3.14	82	31	36.59	229	2.79	608	223	36.68	1,981	3.09
0	0	n/a	0	n/a	0	0	n/a	0	n/a	0	0	n/a	0	n/a
0	0	n/a	0	n/a	5	2	40.00	5	1.00	5	2	40.00	5	1.00
0	0	n/a	0	n/a	170	58	34.12	646	3.80	170	58	34.12	646	3.80
0	0	n/a	0	n/a	6	2	33.33	27	4.50	6	2	33.33	27	4.50
49	22	44.90	159	3.24	14	4	28.57	58	4.14	63	26	41.27	217	3.44
49	22	44.90	159	3.24	195	66	33.85	736	3.77	244	88	36.07	895	3.67
2,884	1,388	35.53	13,176	3.39	443	142	33.41	1,617	3.65	4,327	1,528	35.31	14,793	3.42

OTHER

OTHER														
Other Fluoridated					Other Non-Fluoridated					Other				
Number	No. of children caries free	% caries free	No. of decayed, missing & filled teeth	mean dmft	Number	No. of children caries free	% caries free	No. of decayed, missing & filled teeth	Mean dmft	Number	No. of children caries free	% caries free	No. of decayed, missing & filled teeth	Mean dmft
0	0	n/a	0	n/a	539	276	51.21	1,064	1.97	539	276	51.21	1,064	1.97
3,789	2,694	71.10	4,143	1.09	397	262	65.99	511	1.29	4,186	2,956	70.62	4,654	1.11
2,504	1,829	73.04	2,548	1.02	151	103	68.21	206	1.36	2,655	1,932	72.77	2,754	1.04
2,270	1,436	63.26	3,418	1.51	325	223	68.62	370	1.14	2,595	1,659	63.93	3,788	1.46
8,563	5,959	69.59	10,109	1.18	1,412	864	61.19	2,151	1.52	9,975	6,823	68.40	12,260	1.23
1,133	815	71.93	1,804	1.59	1,290	900	69.77	1,906	1.48	2,423	1,715	70.78	3,712	1.53
136	93	68.38	88	0.65	413	283	68.52	646	1.56	549	376	68.49	734	1.34
44	37	84.09	31	0.70	1,006	600	59.64	1,644	1.63	1,050	637	60.67	1,675	1.60
157	104	66.24	238	1.52	56	43	76.79	43	0.77	213	147	69.01	281	1.32
787	514	65.31	1,060	1.35	350	203	58.00	597	1.71	1,137	717	63.06	1,657	1.46
2,257	1,553	69.25	3,221	1.43	3,115	2,028	65.14	4,838	1.55	5,372	3,592	66.87	8,059	1.50
460	323	70.22	419	0.91	523	341	65.20	607	1.16	983	664	67.55	1,026	1.04
807	559	69.27	805	1.00	508	316	62.20	775	1.53	1,315	875	66.54	1,580	1.20
0	0	n/a	0	n/a	539	354	65.68	696	1.29	539	354	65.68	696	1.29
1,031	712	68.06	1,116	1.08	59	33	55.93	86	1.46	1,090	745	68.35	1,202	1.10
2,038	1,665	81.70	1,144	0.56	13	11	84.62	5	0.38	2,051	1,676	81.72	1,149	0.56
114	84	73.68	71	0.62	171	126	73.68	171	1.00	285	210	73.68	242	0.85
4,450	3,343	75.12	3,555	0.80	1,813	1,181	65.14	2,340	1.29	5,263	4,524	72.23	5,895	0.94
0	0	n/a	0	n/a	1,225	861	70.29	1,358	1.11	1,225	861	70.29	1,358	1.11
0	0	n/a	0	n/a	402	258	64.18	677	1.68	402	258	64.18	677	1.68
59	34	57.63	98	1.66	4,100	2,751	67.10	5,250	1.28	4,159	2,785	66.96	5,348	1.28
0	0	n/a	0	n/a	544	336	61.76	782	1.44	544	336	61.76	782	1.44
1,164	876	75.26	943	0.81	1,353	972	71.84	1,376	1.02	2,517	1,848	73.42	2,319	0.92
1,223	910	74.41	1,041	0.85	7,624	5,173	67.92	9,143	1.24	8,847	6,068	68.81	10,484	1.19
16,493	11,775	71.39	17,326	1.09	13,964	9,252	66.26	18,772	1.34	30,457	21,027	69.04	36,636	1.20

Table 1: Dental health status of Year 8 children 2011

TOTAL															
DHB Region	Total					Fluoridated					Non-fluoridated				
	Number	No. of children caries free	% caries free	No. of decayed, missing & filled teeth	mean dmft	Number	No. of children caries free	% caries free	No. of decayed, missing & filled teeth	Mean dmft	Number	No. of children caries free	% caries free	No. of decayed, missing & filled teeth	Mean dmft
Northland	1,068	536	50.19	2,454	2.30	-	0	n/a	0	n/a	1,068	536	50.19	2,454	2.30
Waitemata	4,679	2,681	57.30	4,654	0.99	4,095	2,356	57.53	4,066	0.99	584	325	55.65	588	1.01
Auckland	4,466	2,613	58.51	4,605	1.03	4,339	2,550	58.77	4,422	1.02	127	63	49.61	183	1.44
Counties Manukau	5,182	2,456	47.39	7,450	1.44	4,735	2,225	46.99	6,946	1.47	447	231	51.68	504	1.13
Northern region providers	15,395	8,286	53.82	19,163	1.24	13,169	7,121	54.15	15,434	1.17	2,226	1,155	51.89	3,729	1.88
Waikato	4,418	2,436	55.14	6,609	1.50	2,283	1,295	56.72	3,110	1.36	2,135	1,141	53.44	3,499	1.64
Lakes	1,318	503	38.16	2,672	2.03	309	161	52.10	405	1.31	1,009	342	33.89	2,267	2.25
Bay of Plenty	1,836	915	49.84	3,061	1.67	103	63	61.17	174	1.69	1,733	852	49.16	2,887	1.67
Tairāwhiti	688	378	54.94	732	1.06	565	316	55.93	580	1.03	123	62	50.41	152	1.24
Taranaki	1,566	810	51.72	1,745	1.11	1,147	605	52.75	1,287	1.12	419	205	48.93	458	1.09
Midland region providers	9,826	5,042	51.31	14,819	1.51	4,487	2,440	55.37	5,556	1.26	5,419	2,802	49.02	9,263	1.71
Hawkes Bay	1,277	689	53.95	1,594	1.25	699	403	57.65	759	1.09	578	286	49.48	835	1.44
Midcentral	2,122	1,024	48.26	3,179	1.50	1,276	575	45.06	1,989	1.56	846	449	53.07	1,190	1.41
Whanganui	806	410	50.87	1,052	1.31	-	0	n/a	0	n/a	806	410	50.87	1,052	1.31
Hutt Valley	1,538	909	59.10	1,378	0.90	1,488	885	59.48	1,317	0.89	50	24	48.00	61	1.22
Capital & Coast	2,563	1,701	66.37	1,813	0.71	2,512	1,672	66.56	1,770	0.70	51	29	56.86	43	0.84
Wairarapa	411	204	49.64	508	1.24	180	94	52.22	226	1.26	231	110	47.62	282	1.22
Central region providers	8,717	4,937	56.64	9,524	1.09	6,155	3,629	58.96	6,061	0.98	2,562	1,308	51.05	3,463	1.35
Nelson-Marlborough	1,682	937	55.71	1,750	1.04	-	0	n/a	0	n/a	1,682	937	55.71	1,750	1.04
West Coast	395	188	47.59	551	1.39	-	0	n/a	0	n/a	395	188	47.59	551	1.39
Canterbury	4,832	2,732	56.54	4,826	1.00	84	33	39.29	133	1.58	4,748	2,699	56.84	4,893	0.99
South Canterbury	664	341	51.36	856	1.29	-	0	n/a	0	n/a	664	341	51.36	856	1.29
SouthernDHB	3,148	1,530	48.60	3,956	1.26	1,743	868	49.80	2,069	1.19	1,405	662	47.12	1,887	1.34
Southern region providers	18,721	9,728	53.43	11,939	1.11	1,827	901	49.32	2,202	1.21	8,894	4,827	54.27	9,737	1.09
New Zealand	44,659	23,993	53.72	55,445	1.24	25,559	14,101	55.17	29,263	1.14	19,104	9,892	51.79	26,192	1.37

PACIFIC														
Pacific Island - Fluoridated					Pacific Island Non-fluoridated					Pacific Island				
Number	No. of children caries free	% caries free	No. of decayed, missing & filled teeth	Mean dmft	Number	No. of children caries free	% caries free	No. of decayed, missing & filled teeth	Mean dmft	Number	No. of children caries free	% caries free	No. of decayed, missing & filled teeth	Mean dmft
0	0	n/a	0	n/a	0	0	n/a	0	n/a	0	0	n/a	0	n/a
420	172	40.95	742	1.77	18	5	27.78	27	1.50	438	177	40.41	769	1.76
1,077	447	41.50	1,839	1.71	27	7	25.93	85	3.15	1104	454	41.12	1924	1.74
1,436	512	35.65	2,859	1.99	12	6	50.00	22	1.83	1448	518	35.77	2881	1.99
2,933	1,131	38.56	5,440	1.85	57	18	31.36	134	2.35	2990	1149	38.43	5574	1.86
96	33	34.38	230	2.40	25	7	28.00	54	2.16	121	40	33.06	284	2.35
6	1	16.67	19	3.17	29	8	27.59	96	3.31	35	9	25.71	115	3.29
0	0	n/a	0	n/a	29	15	51.72	60	2.07	29	15	51.72	60	2.07
17	4	23.53	38	2.24	0	0	n/a	0	n/a	17	4	23.53	38	2.24
20	8	40.00	33	1.65	1	0	0.00	1	1.00	21	8	38.10	34	1.62
139	46	33.09	320	2.30	64	30	35.71	211	2.51	223	76	34.08	531	2.38
29	5	17.24	66	2.28	16	5	31.25	31	1.94	45	10	22.22	97	2.16
44	10	22.73	117	2.66	49	17	34.69	132	2.69	93	27	29.03	249	2.68
0	0	n/a	0	n/a	19	7	36.84	52	2.74	19	7	36.84	52	2.74
150	64	42.67	243	1.62	6	2	33.33	17	2.83	156	66	42.31	260	1.67
303	152	50.17	341	1.13	0	0	n/a	0	n/a	303	152	50.17	341	1.13
6	2	33.33	9	1.50	9	5	55.56	7	0.78	15	7	46.67	16	1.07
532	233	43.80	776	1.46	99	38	38.36	239	2.41	631	269	42.63	1,015	1.81
0	0	n/a	0	n/a	0	0	n/a	0	n/a	0	0	n/a	0	n/a
0	0	n/a	0	n/a	5	1	20.00	17	3.40	5	1	20.00	17	3.40
1	0	0.00	2	2.00	168	71	42.26	264	1.57	169	71	42.01	266	1.57
0	0	n/a	0	n/a	3	1	33.33	7	2.33	3	1	33.33	7	2.33
47	18	38.30	94	2.00	14	4	28.57	33	2.36	61	22	36.07	127	2.08
48	18	37.50	96	2.00	190	77	40.53	321	1.69	238	95	39.92	417	1.75
3,652	1,428	39.10	6,632	1.82	430	161	37.44	905	2.10	4082	1569	38.93	7,537	1.86

MAORI

Maori - Fluoridated						Maori Non-Fluoridated						Maori							
Number	No. of children caries free	% caries free	No. of decayed, missing & filled teeth	Mean dmft	Number	No. of children caries free	% caries free	No. of decayed, missing & filled teeth	Mean dmft	Number	No. of children caries free	% caries free	No. of decayed, missing & filled teeth	Mean dmft	Number	No. of children caries free	% caries free	No. of decayed, missing & filled teeth	Mean dmft
0	0	n/a	0	n/a	527	132	25.05	1,683	3.19	527	132	25.05	1,683	3.19	464	212	45.69	638	1.38
464	212	45.69	638	1.38	69	34	49.28	98	1.42	533	246	46.15	736	1.38	492	240	48.78	664	1.35
1,040	421	40.48	1,732	1.67	20	9	45.00	25	1.25	512	249	48.63	689	1.35	1,996	873	43.74	3,034	1.52
1,996	873	43.74	3,034	1.52	95	41	43.16	141	1.48	1,135	462	40.70	1,873	1.65	1,385	604	43.61	2,222	1.64
					711	216	30.38	1,947	2.74	2,707	1,089	40.23	4,981	1.84					
655	265	40.46	1,236	1.89	576	222	38.54	1,359	2.36	1,231	487	39.56	2,595	2.11	109	50	45.87	217	1.99
109	50	45.87	217	1.99	528	138	26.14	1,452	2.75	637	188	29.51	1,669	2.62	63	30	47.62	138	2.19
63	30	47.62	138	2.19	541	202	37.34	1,347	2.49	604	232	38.41	1,485	2.46	290	146	50.34	363	1.25
290	146	50.34	363	1.25	112	55	49.11	142	1.27	402	201	50.00	505	1.26	268	113	42.16	368	1.37
268	113	42.16	368	1.37	90	35	38.89	172	1.91	356	148	41.34	540	1.51	1,385	604	43.61	2,222	1.64
1,385	604	43.61	2,222	1.64	1,847	652	35.30	4,472	2.42	3,232	1,256	38.86	6,794	2.10					
176	76	43.18	294	1.67	209	88	42.11	369	1.77	385	164	42.60	663	1.72	237	103	43.46	415	1.75
237	103	43.46	415	1.75	210	87	41.43	401	1.91	447	190	42.51	816	1.83	0	0	n/a	0	n/a
0	0	n/a	0	n/a	280	117	41.79	454	1.62	280	117	41.79	454	1.62	275	130	47.27	324	1.18
275	130	47.27	324	1.18	13	6	46.15	9	0.69	288	136	47.22	333	1.16	307	190	61.89	278	0.91
307	190	61.89	278	0.91	6	0	0.00	15	2.50	313	190	60.70	293	0.94	64	28	43.75	88	1.38
64	28	43.75	88	1.38	49	19	38.78	78	1.59	113	47	41.59	166	1.47	1,053	527	49.76	1,399	1.32
1,053	527	49.76	1,399	1.32	767	317	41.33	1,326	1.73	1,826	844	46.22	2,725	1.49					
176	76	43.18	294	1.67	209	88	42.11	369	1.77	385	164	42.60	663	1.72	0	0	n/a	0	n/a
237	103	43.46	415	1.75	210	87	41.43	401	1.91	447	190	42.51	816	1.83	0	0	n/a	0	n/a
0	0	n/a	0	n/a	280	117	41.79	454	1.62	280	117	41.79	454	1.62	6	2	33.33	9	1.50
275	130	47.27	324	1.18	13	6	46.15	9	0.69	288	136	47.22	333	1.16	0	0	n/a	0	n/a
307	190	61.89	278	0.91	6	0	0.00	15	2.50	313	190	60.70	293	0.94	231	99	42.86	359	1.55
64	28	43.75	88	1.38	49	19	38.78	78	1.59	113	47	41.59	166	1.47	237	101	42.62	368	1.58
1,053	527	49.76	1,399	1.32	767	317	41.33	1,326	1.73	1,826	844	46.22	2,725	1.49					
176	76	43.18	294	1.67	209	88	42.11	369	1.77	385	164	42.60	663	1.72	4,877	2,105	45.01	7,125	1.52
237	103	43.46	415	1.75	210	87	41.43	401	1.91	447	190	42.51	816	1.83					
0	0	n/a	0	n/a	280	117	41.79	454	1.62	280	117	41.79	454	1.62					
275	130	47.27	324	1.18	13	6	46.15	9	0.69	288	136	47.22	333	1.16					
307	190	61.89	278	0.91	6	0	0.00	15	2.50	313	190	60.70	293	0.94					
64	28	43.75	88	1.38	49	19	38.78	78	1.59	113	47	41.59	166	1.47					
1,053	527	49.76	1,399	1.32	767	317	41.33	1,326	1.73	1,826	844	46.22	2,725	1.49					
176	76	43.18	294	1.67	209	88	42.11	369	1.77	385	164	42.60	663	1.72					
237	103	43.46	415	1.75	210	87	41.43	401	1.91	447	190	42.51	816	1.83					
0	0	n/a	0	n/a	280	117	41.79	454	1.62	280	117	41.79	454	1.62					
275	130	47.27	324	1.18	13	6	46.15	9	0.69	288	136	47.22	333	1.16					
307	190	61.89	278	0.91	6	0	0.00	15	2.50	313	190	60.70	293	0.94					
64	28	43.75	88	1.38	49	19	38.78	78	1.59	113	47	41.59	166	1.47					
1,053	527	49.76	1,399	1.32	767	317	41.33	1,326	1.73	1,826	844	46.22	2,725	1.49					
176	76	43.18	294	1.67	209	88	42.11	369	1.77	385	164	42.60	663	1.72					
237	103	43.46	415	1.75	210	87	41.43	401	1.91	447	190	42.51	816	1.83					
0	0	n/a	0	n/a	280	117	41.79	454	1.62	280	117	41.79	454	1.62					
275	130	47.27	324	1.18	13	6	46.15	9	0.69	288	136	47.22	333	1.16					
307	190	61.89	278	0.91	6	0	0.00	15	2.50	313	190	60.70	293	0.94					
64	28	43.75	88	1.38	49	19	38.78	78	1.59	113	47	41.59	166	1.47					
1,053	527	49.76	1,399	1.32	767	317	41.33	1,326	1.73	1,826	844	46.22	2,725	1.49					
176	76	43.18	294	1.67	209	88	42.11	369	1.77	385	164	42.60	663	1.72					
237	103	43.46	415	1.75	210	87	41.43	401	1.91	447	190	42.51	816	1.83					
0	0	n/a	0	n/a	280	117	41.79	454	1.62	280	117	41.79	454	1.62					
275	130	47.27	324	1.18	13	6	46.15	9	0.69	288	136	47.22	333	1.16					
307	190	61.89	278	0.91	6	0	0.00	15	2.50	313	190	60.70	293	0.94					
64	28	43.75	88	1.38	49	19	38.78	78	1.59	113	47	41.59	166	1.47					
1,053	527	49.76	1,399	1.32	767	317	41.33	1,326	1.73	1,826	844	46.22	2,725	1.49					
176	76	43.18	294	1.67	209	88	42.11	369	1.77	385	164	42.60	663	1.72					
237	103	43.46	415	1.75	210	87	41.43	401	1.91	447	190	42.51	816	1.83					
0	0	n/a	0	n/a	280	117	41.79	454	1.62	280	117	41.79	454	1.62					
275	130	47.27	324	1.18	13	6	46.15	9	0.69	288	136	47.22	333	1.16					
307	190	61.89	278	0.91	6	0	0.00	15	2.50	313	190	60.70	293	0.94					
64	28	43.75	88	1.38	49	19	38.78	78	1.59	113	47	41.59	166	1.47					
1,053	527	49.76	1,399	1.32	767	317	41.33	1,326	1.73	1,826	844	46.22	2,725	1.49					
176	76	43.18	294	1.67	209	88	42.11	369	1.77	385	164	42.60	663	1.72					
237	103	43.46	415	1.75	210	87	41.43	401	1.91	447	190	42.51	816	1.83					
0	0	n/a	0	n/a	280	117	41.79	454	1.62	280	117	41.79	454	1.62					
275	130	47.27	324	1.18	13	6	46.15	9	0.69	288	136	47.22	333	1.16					
307	190	61.89	278	0.91	6	0	0.00	15	2.50	313	190	60.70	293	0.94					
64	28	43.75	88	1.38	49	19	38.78	78	1.59	113	47	41.59	166	1.47					
1,053	527	49.76	1,399	1.32	767	317	41.33	1,326	1.73	1,826	844	46.22	2,725	1.49					
176	76	43.18	294	1.67	209	88	42.11	369	1.77	385	164	42.60	663	1.72					
237	103	43.46	415	1.75	210	87	41.43	401	1.91	447	190	42.51	816	1.83					
0	0	n/a	0	n/a	280	117	41.79	454	1.62	280	117	41.79	454	1.62					
275	130	47.27	324	1.18	13	6	46.15	9	0.69	288	136	47.22	333	1.16					
307	190	61.89	278	0.91	6	0	0.00	15	2.50	313	190	60.70	293	0.94					
64	28	43.75	88	1.38	49	19	38.78	78	1.59	113	47	41.59	166	1.47					
1,053	527	49.76	1,399	1.32	767	317	41.33	1,326	1.73	1,826	844	46.22	2,725	1.49					
176	76	43.18	294	1.67	209	88	42.11	369	1.77	385	164	42.60	663	1.72					
237	103	43.46	415	1.75	21														

OTHER

Other Fluoridated					Other Non-Fluoridated					Other				
Number	No. of children caries free	% caries free	No. of decayed, missing & filled teeth	mean dmft	Number	No. of children caries free	% caries free	No. of decayed, missing & filled teeth	Mean dmft	Number	No. of children caries free	% caries free	No. of decayed, missing & filled teeth	Mean dmft
0	0	n/a	0	n/a	541	404	74.68	771	1.43	541	404	74.68	771	1.43
3,211	1,972	61.41	2,686	0.84	497	286	57.55	463	0.93	3,708	2,258	60.90	3,149	0.85
2,770	1,863	67.26	1,919	0.69	80	47	58.75	73	0.91	2,850	1,910	67.02	1,992	0.70
2,259	1,292	57.19	2,355	1.04	340	184	54.12	341	1.00	2,599	1,476	56.79	2,696	1.04
8,240	5,127	62.22	6,960	0.84	1,438	921	63.17	1,648	1.13	9,698	6,048	62.36	8,608	0.89
1,532	997	65.08	1,644	1.07	1,534	912	59.45	2,086	1.36	3,066	1,909	62.26	3,730	1.22
194	110	56.70	169	0.87	452	196	43.36	719	1.59	646	306	47.37	888	1.37
40	33	82.50	36	0.90	1,163	635	54.60	1,480	1.27	1,203	668	55.53	1,516	1.26
258	166	64.34	179	0.69	11	7	63.64	10	0.91	269	173	64.31	189	0.70
859	484	56.34	886	1.03	328	170	51.83	285	0.87	1,187	654	55.10	1,171	0.99
2,983	1,790	62.09	2,914	1.01	3,488	1,820	55.05	4,500	1.31	6,271	3,710	59.23	7,494	1.18
494	322	65.18	399	0.81	353	193	54.67	435	1.23	847	515	60.80	834	0.98
995	462	46.43	1,457	1.46	587	345	58.77	657	1.12	1,582	807	51.01	2,114	1.34
0	0	n/a	0	n/a	507	286	56.41	546	1.08	507	286	56.41	546	1.08
1,063	691	65.00	750	0.71	31	16	51.61	35	1.13	1,094	707	64.63	785	0.72
1,902	1,330	69.93	1,151	0.61	45	29	64.44	28	0.62	1,947	1,359	69.80	1,179	0.61
110	64	58.18	129	1.17	173	86	49.71	197	1.14	283	150	53.00	326	1.15
4,561	2,863	62.86	3,886	0.85	1,696	955	56.31	1,898	1.12	6,260	3,824	61.09	5,764	0.92
0	0	n/a	0	n/a	1,411	801	56.77	1,375	0.87	1,411	801	56.77	1,375	0.87
0	0	n/a	0	n/a	341	166	48.68	442	1.30	341	166	48.68	442	1.30
77	31	40.26	122	1.58	4,181	2,460	58.84	3,819	0.91	4,258	2,491	58.50	3,941	0.93
0	0	n/a	0	n/a	612	324	52.94	748	1.22	612	324	52.94	748	1.22
1,465	751	51.26	1,616	1.10	1,287	614	47.71	1,685	1.31	2,752	1,365	49.60	3,301	1.20
1,542	732	50.71	1,738	1.13	7,832	4,365	55.73	8,069	1.03	9,374	5,147	54.91	9,807	1.05
17,229	10,568	61.34	15,468	0.90	14,474	8,161	56.38	16,195	1.12	31,763	18,729	59.08	31,693	1.00