

Supplementary Material

Dental Caries

Table 1 PICOS criteria for the evaluation of the dental effects of water fluoridation, overview of reviews

Criterion	Description
Population	Populations of all ages Subgroup analysis: Life stage: Infants (ages 0-4), children (ages 5-11), adolescents (ages 12-17), adults (ages 18-64) and later adulthood age (ages 65+) People with special needs: including low income and social disadvantage Rural and remote communities
Intervention/Exposure	Drinking water with a fluoride level within current Australian levels (0.4ppm-1.5ppm)
Comparator	Non-fluoridated drinking water (<0.4ppm)
Outcome	Dental caries
Study type	Reviews of primary studies. To be included in this overview a review must include a systematic search that attempts to identify all relevant primary studies.

Abbreviations: ppm = parts per million

Health Effects

Table 3 PICOS criteria for the evaluation of the health effects of water fluoridation

Criterion	Description
Population	Populations of all ages Subgroup analysis: <ul style="list-style-type: none"> Life stage: Infants (ages 0-4), children (ages 5-11), adolescents (ages 12-17), adults (ages 18-64) and later adulthood age (ages 65+) People with special needs: including low income and social disadvantage Rural and remote communities
Intervention/Exposure	Fluoride at any concentration present in drinking water
Comparator	1. Non fluoridated drinking water (<0.4ppm); or 2. Drinking water with a different concentration of fluoride.
Outcome	Any reported health effects (excluding dental caries and dental fluorosis) including: <ul style="list-style-type: none"> Neuro-cognitive disorders Dementia Neuro-developmental disorders All cancers (malignant neoplasms) other than bone cancer Cancers of the bone, and specifically osteosarcoma Congenital abnormalities Skeletal effects Mortality Renal effects Thyroid dysfunction Any other adverse effects
Study type	Any comparative study design

Abbreviations: ppm = parts per million

Figure 1. PICOS Criteria for Dental Caries and Health Effects

Dental Caries

Table 10 Search performed using EMBASE.com

No	Terms	Citations
1	exp Fluoridation/ or Fluoridation.af.	12,670
2	((fluorid* or fluorin* or flurin* or flurid*) .ab,ti.	108,197
3	1 or 2	110,626
4	exp water supply/	60,521
5	*water** .ab,ti.	1,227,954
6	4 or 5	1,239,969
7	3 and 6	18,515
8	exp dental caries/	82,443
9	*tooth deminerali?ation'.af.	1,966
10	*dmf index'.af.	8,892
11	(dmft or dmfs or dft or dfs).af.	61,510
12	((tooth or teeth or dent*) and (caries or carious or decay or deminerali* or caviti*)).af.	156,187
13	caries.af.	98,098
14	8 or 9 or 10 or 11 or 12 or 13	213,473
15	7 and 14	5,070
16	limit 15 to yr="2006 -Current"	1,298
17	limit 16 to human	1,059

Health Effects

Table 17 Search performed using EMBASE.com

No	Terms	Citations
1	'fluoridation'/exp OR 'fluoridation'	6,394
2	'fluorid':ab,ti OR fluorin':ab,ti OR flurin':ab,ti OR flurid':ab,ti	58,750
3	#1 OR #2	59,975
4	'water supply'/exp	28,515
5	Water* .ab,ti	664,218
6	#4 OR #5	670,086
7	#3 AND #6	10,048
8	#7 AND ([humans]/lim	4,058
9	#8 NOT ([conference abstract]/lim OR [editorial]/lim OR [letter]/lim OR [note]/lim)	3,787
10	#9 AND [1-10-2006]/sd	1,113

Figure 2. Embase.com Search Terms for Dental Caries and Health Effects

Dental Caries

Table 11 Search performed using Psychinfo via Ovid

No	Terms	Citations
1	(fluorid\$ or fluorin\$ or flurin\$ or flurid\$).mp.	357
2	water\$.mp.	34105
3	1 and 2	76
4	limit 3 to human	52
5	limit 4 to yr="2006 -Current"	33

Health Effects

Table 18 Search performed using Psychinfo via Ovid

No	Terms	Citations
1	(fluorid\$ or fluorin\$ or flurin\$ or flurid\$).mp.	314
2	water\$.mp.	31,491
3	1 and 2	64
4	limit 3 to human	43
5	limit 4 to yr="2006 -Current"	24

Figure 3. PsychINFO via Ovid Search Terms for Dental Caries and Health Effects

Dental Caries

Table 12 Search performed using All EBM via Ovid

No	Terms	Citations
1	exp Fluoridation/	43
2	(fluorid\$ or fluorin\$ or flurin\$ or flurid\$).ti.	2,303
3	(fluorid\$ or fluorin\$ or flurin\$ or flurid\$).ab.	2,071
4	1 or 2 or 3	3,318
5	exp Water Supply/	146
6	water\$.ti.	2,587
7	water\$.ab.	11,819
8	5 or 6 or 7	12,601
9	exp dental caries/	1,542
10	caries.af.	3,582
11	'tooth deminerali?ation'.af.	321
12	(dmft or dmfs or dft or dfs).af.	1,773
13	((tooth or teeth or dent*) and (caries or carious or decay or deminerali* or cavit*)).af.	5,271
14	9 or 10 or 11 or 12 or 13	7,085
15	4 and 8 and 14	141
16	limit 15 to yr="2006 -Current" [Limit not valid in DARE; records were retained]	56

Table 13 Search performed using All EBM via Ovid

No	Terms	Citations
1	(fluorid\$ or fluorin\$ or flurin\$ or flurid\$).af.	9,107
2	water\$.af.	98,074
3	1 and 2	1,307
4	Caries.af.	2,796
5	3 and 4	92
6	limit 5 to yr="2006 -Current"	83

Health Effects

Table 19 Search performed using All EBM via Ovid

No	Terms	Citations
1	exp Fluoridation/	42
2	(fluorid\$ or fluorin\$ or flurin\$ or flurid\$).ti.	2,219
3	(fluorid\$ or fluorin\$ or flurin\$ or flurid\$).ab.	2,006
4	1 or 2 or 3	3,188
5	exp Water Supply/	146
6	water\$.ti.	2,359
7	water\$.ab.	10,657
8	5 or 6 or 7	11,409
9	4 and 8	301
10	limit 9 to yr="2006 -Current"	120

Figure 4. All EBM via Ovid Search Terms for Dental Caries and Health Effects

Dental Caries

Table 14 Search performed using preMEDLINE via Ovid

No	Terms	Citations
1	(fluorid\$ or fluorin\$ or flurin\$ or flurid\$).af.	9,107
2	water\$.af.	98,074
3	1 and 2	1,307
4	Caries.af.	2,796
5	3 and 4	92
6	limit 5 to yr="2006 -Current"	83

Health Effects

Table 20 Search performed using preMEDLINE via Ovid

No	Terms	Citations
1	(fluorid\$ or fluorin\$ or flurin\$ or flurid\$).mp.	7,922
2	water\$.mp.	79,761
3	1 and 2	1,090
4	editorial.pt.	18,710
5	Letter.pt.	30,168
6	comment.pt.	47,054
7	4 or 5 or 6	82,201
8	3 not 7	1,070
9	limit 8 to ("in data review" or in process or medline or oldmedline)	281
10	limit 9 to yr="2006 -Current"	277

Figure 5. PreMEDLINE via Ovid Search Terms for Dental Caries and Health Effects

Dental Caries

Table 15 Search performed using Global Health via Ovid

No	Terms	Citations
1	exp Fluoridation/	875
2	(fluorid\$ or fluorin\$ or flurin\$ or flurid\$).af.	9745
3	1 or 2	9745
4	exp Water Supply/	9609
5	water\$.af.	256455
6	4 or 5	256455
7	3 and 6	4492
8	exp dental caries/	8280
9	caries.af.	9563
10	'tooth deminerali?ation'.af.	13
11	(dmft or dmfs or dft or dfs).af.	1665
12	((tooth or teeth or dent*) and (caries or carious or decay or deminerali* or cavit*)).af.	11637
13	8 or 9 or 10 or 11 or 12	12431
14	7 and 13	1216
15	limit 14 to yr="2006 -Current"	337

Health Effects

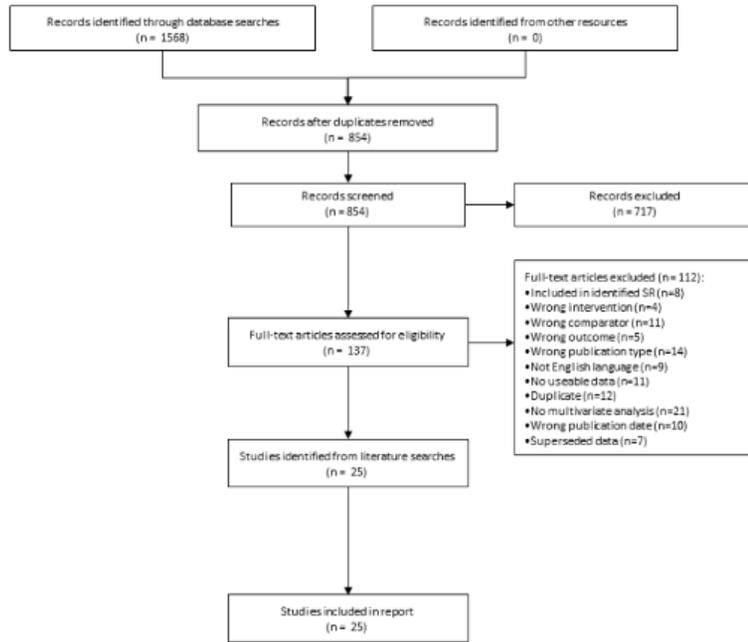
Table 21 Search performed using Global Health via Ovid

No	Terms	Citations
1	exp Fluoridation/	854
2	(fluorid\$ or fluorin\$ or flurin\$ or flurid\$).ti.	4,853
3	(fluorid\$ or fluorin\$ or flurin\$ or flurid\$).ab.	7,402
4	1 or 2 or 3	8,835
5	exp Water Supply/	8,856
6	water\$.ti.	40,602
7	water\$.ab.	197,942
8	5 or 6 or 7	204,391
9	'man'.od.	1,631,278
10	4 and 8 and 9	2,063
11	limit 10 to yr="2006 -Current"	632

Figure 6. Global Health via Ovid Search Terms for Dental Caries and Health Effects

Dental Caries

Figure 2 Summary of review of citations, systematic review of recent primary studies



Health Effects

Figure 3 Summary of review of citations

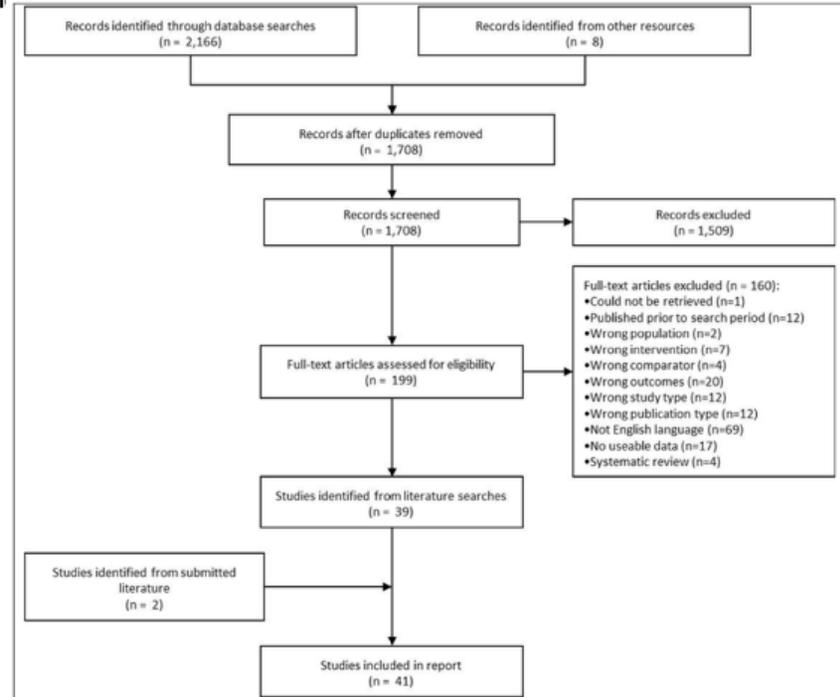


Figure 7. Summary of Review of Citations for Dental Caries and Health Effects