

Public attitudes on dental health and water fluoridation in the West Midlands

Report on Ipsos MORI survey 2010



West Midlands

Contents

Summary....**Page 3**

1. Monitoring public attitudes on dental health and water fluoridation**Page 5**
3. Visiting the dentist....**Page 9**
4. Proportion of people visiting a dentist on the NHS....**Page 12**
5. Satisfaction with dental care....**Page 14**
6. Whether people think children's dental health is good or poor in their area....**Page 16**
7. Whether people think fluoride helps to reduce tooth decay**Page 19**
8. Whether people think it's possible to reduce tooth decay by adding fluoride to the water they drink....**Page 22**
9. Whether people think fluoride is present naturally in water....**Page 24**
10. Whether people think fluoride has been added to their water supply....**Page 26**
11. Whether people think fluoride should be added to their tap water if it can reduce tooth decay....**Page 28**
12. The extent to which people support or oppose fluoride being added to tap water....**Page 30**
13. Why 67% of people think fluoride should be added to tap water**Page 33**
14. Why 22% of people think fluoride should not be added to tap water....**Page 33**
15. What would help the 11% of people who are undecided about water fluoridation to make up their minds....**Page 34**
16. Where people would look for more information about fluoride....**Page 34**
17. Appendix (regional topline results)....**Page 35**

Summary

This report sets out the results of a survey of people's attitudes to dental health and water fluoridation undertaken for NHS West Midlands by Ipsos MORI between 16th December 2009 and 24th March 2010. Interviews were conducted face to face with a total of 3,516 people aged 16 and over drawn from every part of the region.

KEY FINDINGS

Most recent visit to the dentist

82% of those who took part in the survey said they had visited their dentist within the past 2 years, 69% within the past 12 months, and 16% longer than 2 years ago. Only 2% had never visited a dentist.

Proportion of dental visits on the NHS

71% of the most recent visits that people had made to a dentist were on the NHS.

Level of satisfaction with dental care

91% of the people who had visited a dentist were satisfied with the care they received, and 60% were very satisfied.

Whether children's dental health is good or poor

50% of people thought that children's health in their area was good, while 14% thought it was poor and 37% did not know.

Role of fluoride in reducing tooth decay

64% of people thought that fluoride helped to reduce tooth decay, whilst 5% disagreed. 15% neither agreed nor disagreed, whilst 16% did not know.

Reducing tooth decay by adding fluoride to drinking water

51% of people thought it was possible to reduce tooth decay by adding fluoride to drinking water, 18% disagreed and 31% did not know.

Whether fluoride occurs naturally in water

23% of people thought there was fluoride present naturally in water, 39% said there was not and 31% did not know.

Whether fluoride has been added to water

50% of people thought fluoride had been added to their own tap water, 20% said it had not been added and 30% did not know.

Whether fluoride should be added to tap water

On the basis that there is broad scientific agreement that adding fluoride to water reduces tooth decay, 67% of people thought fluoride should be added to tap water, 22% thought it should not be added and 11% did not know.

Proportion of people who strongly support or oppose adding fluoride to tap water

18% of people said they strongly supported fluoride being added to tap water, compared with 6% who strongly opposed the idea.

Why people support fluoridation

Among those who thought fluoride should be added to tap water, 37% did so because they believed it could reduce tooth decay and 24% because they thought it would promote good dental health and/or be good for children.

Why people oppose fluoridation

Among those who thought fluoride should not be added to tap water, 20% said this was because they preferred water to be 'natural' and without additives, 18% wanted a choice, 13% were concerned about possible side effects and 9% gave 'taste' as their reason for opposing fluoridation.

What might help the undecided to make up their minds

Among those who were unsure whether fluoride should or should not be added to water, the biggest single group did not know what would help them decide one way or the other. Among those who knew what might help them decide, the most commonly given suggestions were: scientific research; more information generally about fluoridation; and more information specifically on the benefits and possible risks.

Where people would look for information about fluoridation

61% of people said that if they wanted to find out more about fluoridation they would look for information on the internet, while 26% would ask health organisations and 17% would contact their water company.

2. Monitoring public attitudes on dental health and water fluoridation

Geographical area covered by the West Midlands Strategic Health Authority

NHS West Midlands is the Strategic Health Authority (SHA) for the West Midlands region, covering a population of 5.4 million people in Birmingham, Solihull, Coventry, Dudley, Sandwell, Walsall, Wolverhampton, Herefordshire, Shropshire, Telford & Wrekin, Stoke on Trent, Staffordshire, Warwickshire and Worcestershire.

Promoting good dental health

Both the SHA and local Primary Care Trusts in the region strive to promote the health of the populations for which they are responsible. Dental health is an important part of people's overall health and well-being.

Professional advice is that, to achieve good dental health and minimise the risk of tooth decay, people should brush their teeth with a fluoride toothpaste, restrict their consumption of sugary foods and drinks, and go for regular dental check ups so that potential problems can be identified early on and remedial action taken.^{1, 2, 3}

Supply of fluoridated water

One of the ways of promoting dental health on a population-wide basis is by adjusting the level of fluoride that occurs naturally in all water supplies. In the West Midlands, around 3.7 million people are supplied with water whose natural fluoride content has been topped up in this way. Communities with water fluoridation schemes include Birmingham, Solihull, Coventry, the Black Country, and parts of South Staffordshire, Warwickshire, Worcestershire and Shropshire.

Public knowledge and attitudes on dental health issues

In line with its general approach to monitoring public knowledge and attitudes on key health issues, in 2009 NHS West Midlands commissioned the opinion research company Ipsos MORI to undertake a survey on dental health and water fluoridation.

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1. OPM. *A Futures Study of Dental Decay in 5 and 15 Year Olds in England*, 2005
 2. British Nutrition Foundation. *Oral Health, Diet and Other Factors: The Report of the Nutrition Foundation Task Force*, 1999. Arens U (ed).
 3. Rugg Gunn A. *The Enigma of Dental Caries*. British Dental Journal, 2001, Vol 191: 478-488

The specific objectives of the survey were to ascertain:

- * how often people go to the dentist;
- * what proportion of people use NHS dental services;
- * whether people are satisfied with the dental care they have received;
- * whether they think local children's dental health is generally good or not;
- * what they know and think about water fluoridation;
- * why they support or oppose water fluoridation;
- * what kind of information they want on dental health and fluoridation and where they would look for it.

Survey conducted between December 2009 and March 2010

Ipsos MORI conducted interviews with a total of 3,516 people aged 16 and over across the West Midlands between 16th December 2009 and 24th March 2010. All the interviews were carried out face to face in people's own homes. Interviewees were selected on a quota basis to reflect the make up of the population between males and females; younger and older people; those working full-time and not working full-time; and people from diverse ethnic origins. Data obtained from the responses given by the people interviewed in the survey were then weighted by PCT population size and within each PCT by age, gender, working status and ethnicity to reflect the actual make up of the population according to 2008 Office of National Statistics (ONS) mid-year Census estimates.

Statistical confidence levels

The results of the survey for the West Midlands as a whole are considered to be accurate to within about +/- 2% to 3% at a 95% level of confidence. Statistically, therefore, the chances are 95 in 100 that the results for any given question in the survey will be within 2% to 3% either side of the figure shown. The confidence interval depends on the proportion of people giving a particular answer to a question. So if 10% of those interviewed say 'yes' to a question, the confidence interval is +/-2%. But if 50% say 'yes', the confidence interval is +/-3%. These confidence intervals give a high degree of reliability to the survey findings at the regional level. Whilst, strictly speaking, the tolerances shown here apply only to random samples, in practice good quality quota sampling has been found to behave in the same way.

It is essential to bear these confidence intervals in mind when evaluating the responses to the survey. If the overall regional response to a particular question (based on a demographically representative population sample of over 3,500 people with an effective base size of 1,599) was that 68% said 'yes' and 22% said 'no', then we can be confident that 95 times out of 100 between 65% and 71% of the whole population of the West Midlands would say 'yes' and between 19% and 25% would say 'no'.

However, when a particular sub-sample falls below about 100, the margins of error become too wide to enable conclusions to be drawn with confidence. So if, for example, the sub-sample comprised only 80 people of whom 50% said 'yes' and 40% said 'no' to a particular question, it cannot be said with confidence that if everyone in the population concerned – rather than just 80 people – had been asked the same question, the percentages saying 'yes' and 'no' would have been the same.

It is for this reason that we have primarily confined our analysis of the survey to the region-wide results and the largest sub-samples in which we can have a reasonable degree of confidence as to their accuracy.

Results for the West Midlands region as a whole and for five main geographical areas (sub-samples) within the region

The bar charts in each section of this report show how people aged 16 and over across the whole of the West Midlands responded to a particular question. In addition, the regional results are then broken down into five main geographical sub-samples:

- 1. Birmingham and Solihull** (with a confidence interval of between +/- 4% and 6%)
- 2. The Black Country, comprising Dudley, Sandwell, Walsall and Wolverhampton** (with a confidence interval of between +/- 4% and 6%)
- 3. Coventry and Warwickshire** (with a confidence interval of between +/- 4% and 7%)
- 4. Shropshire, Telford & Wrekin, Herefordshire and Worcestershire – the west of the region** (with a confidence interval of between +/- 2% and 4%)
- 5. Stoke on Trent, North Staffordshire and South Staffordshire** (with a confidence interval of between +/- 3% and 5%)

In the analysis of results that follows in the rest of this report, the reader's attention is drawn to statistically significant differences. Such differences are those where there is a high degree of certainty that where X% of people thought A and Y% of people thought B, and that the gap between the two was real. In other words, the results had at least a 95 in 100 chance of being true, within the stated margins of error, for the whole of the population from which those who were actually interviewed had been drawn.

Equally, the reader's attention is drawn to results where, if the margins of error are taken into account, the actual differences between different geographical areas or different groups in the population might be smaller or,

indeed, wider than the responses given by the people interviewed for the survey appeared to suggest.

Rounding up and rounding down

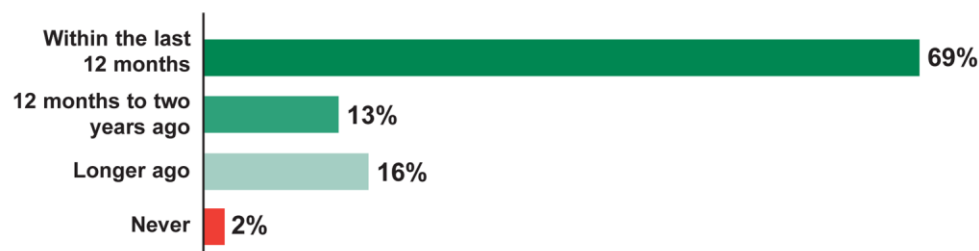
When looking at some of the tables of data presented in the following pages, readers may notice that the total figures for all the responses to a particular question occasionally add up to slightly more or slightly less than 100%. This is due to rounding up or down.

3. Visiting the dentist

People taking part in the Ipsos MORI survey were asked when they had last visited the dentist. Interviewers recorded whether people had visited their dentist in the last 12 months, between 12 months and two years ago, longer ago than that, or had never been to a dentist. The bar chart below shows how, over the region as a whole, people responded to this question.

3.1 REGIONAL RESULT FOR THE WEST MIDLANDS AS A WHOLE

Question: When was the last time you visited a dentist?



Quota sample of 3,516 residents aged 16+ of the West Midlands region
Margin of error: +/- 2% to 3%

The survey found that, across the West Midlands as a whole, 69% of people had visited the dentist within the previous 12 months; 13% between 12 months and 2 years ago; and 16% longer ago than that. Just 2% said they had never been to a dentist.

The results of the survey also suggested that:

- * More women (73%) than men (65%) had visited the dentist within the previous 12 months.
- * Those aged 35 to 54 (77%) were the most likely to have visited the dentist within the previous 12 months, whilst 25 to 34 year olds (62%) and the over-75s (62%) were the least likely.
- * Those aged 35 to 54 were the most likely to have visited the dentist within the previous 2 years (the maximum recall period for dental check ups), whilst the over-65s were the least likely.

When looking at these responses, it is important to bear in mind that the frequency with which NHS patients are called for dental check ups depends on their level of need.⁴ Their dentist may, for example, decide that they need to return every three to six months for a check up. Alternatively, if their dental health is very good, the dentist may feel that a check up every 18 to 24 months would be sufficient.

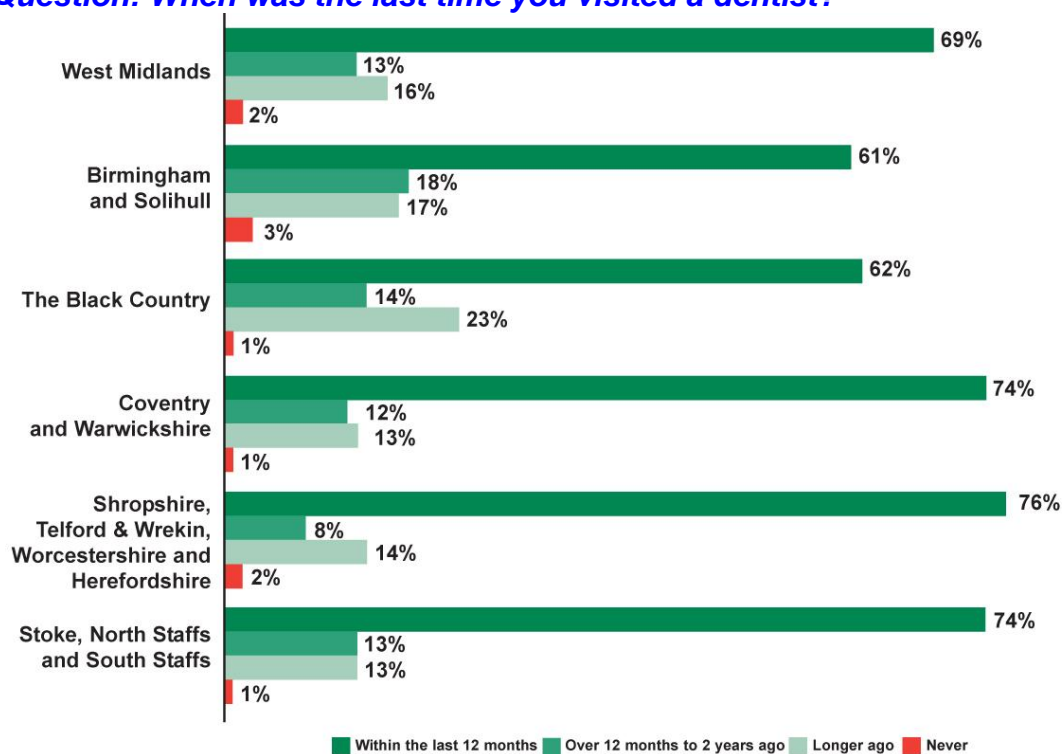
4. National Institute for Clinical Excellence. *Recall Interval between Routine Dental Examinations*. Clinical Guidance 19, 2004.

3.2 COMPARING THE OVERALL WEST MIDLANDS RESULT WITH RESULTS FROM SPECIFIC AREAS

As explained in an earlier section of this report, the results for each question in the survey are presented both for the West Midlands as a whole and, in addition, for five specific parts of the region:

1. Birmingham and Solihull
2. The Black Country (including Dudley, Sandwell, Walsall and Wolverhampton)
3. Coventry and Warwickshire
4. Shropshire, Telford & Wrekin, Herefordshire and Worcestershire
5. Stoke on Trent, North Staffordshire and South Staffordshire

Question: When was the last time you visited a dentist?



Margin of error for West Midlands: +/- 2% to 3% (3,516 respondents)

Margin of error for Birmingham and Solihull: +/- 4% to 6% (322 respondents)

Margin of error for The Black Country: +/-4% to 6% (282 respondents)

Margin of error for Coventry and Warwickshire: +/-4% to 7% (262 respondents)

Margin of error for Shropshire, T&W, Worcestershire and Herefordshire: +/-2% to 4% (1,543 respondents)

Margin of error for Stoke, North Staffs and South Staffs: +/- 3% to 5% (1,107 respondents)

Analysis of figures for different parts of the region (having taken full account of the margins of error) suggests that:

- * More people in the west of the region (76%), Stoke/Staffordshire (74%) and Coventry and Warwickshire (74%) had visited the dentist in the previous 12 months than in the region as a whole (69%).

- * Fewer people in The Black Country (76%) had visited the dentist in the previous 2 years than in the region as a whole (82%).
- * Over the previous 12 months, fewer people in Birmingham and Solihull (61%) and The Black Country (62%) had visited the dentist than in other parts of the region (varying from 74% to 76%).

4. Proportion of people visiting a dentist on the NHS

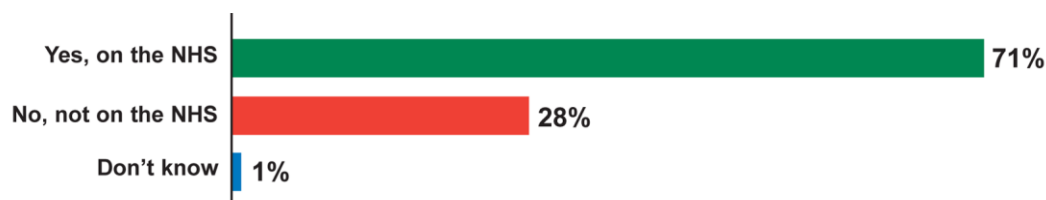
People who had visited a dentist were then asked whether their last dental visit had been on the NHS or not.

The bar chart below shows how they responded over the region as a whole. The bar chart on the following page compares the West Midlands results with those for five geographical areas within the region:

- * Birmingham and Solihull
- * The Black Country
- * Coventry and Warwickshire
- * Shropshire, Telford & Wrekin, Herefordshire and Worcestershire
- * Stoke on Trent, North Staffordshire and South Staffordshire

4.1 REGIONAL RESULT FOR THE WEST MIDLANDS AS A WHOLE

Question: *Was your last dental visit on the NHS?*

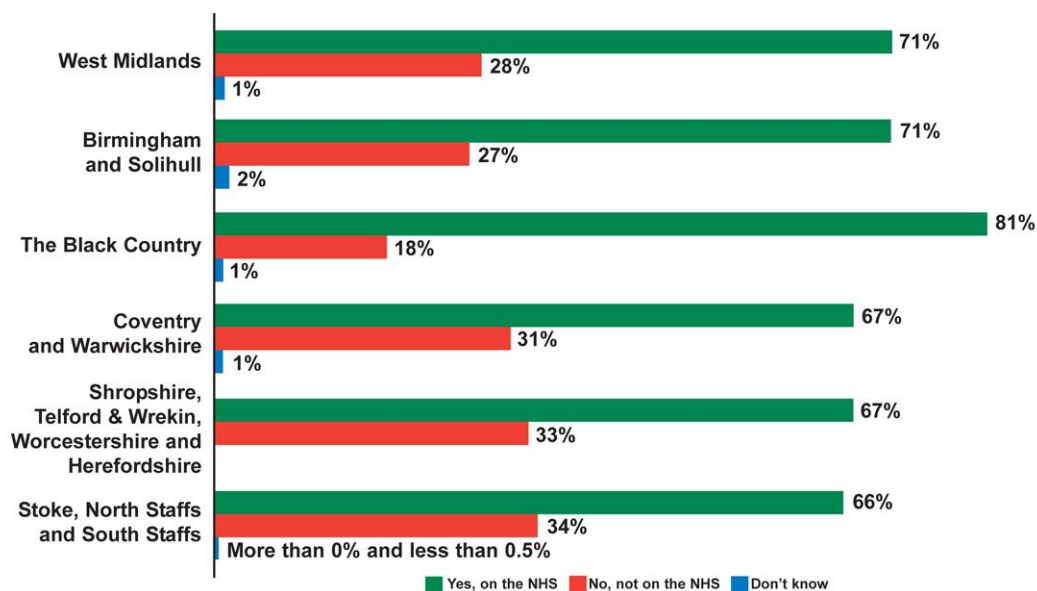


Base: 3,477 people who said they had visited a dentist
Margin of error: +/- 2% to 3%

Of the people interviewed for our survey who said they had visited a dentist, 71% of them said they had done so on the NHS, compared with 28% who said they had not done so on the NHS. Out of the total, 1% did not know whether their visit had been on the NHS or not.

4.2 COMPARING THE OVERALL WEST MIDLANDS RESULT WITH RESULTS FROM SPECIFIC AREAS

Question: Was your last dental visit on the NHS?



Margin of error for West Midlands: +/- 2% to 3% (3,477 respondents)

Margin of error for Birmingham and Solihull: +/- 4% to 6% (315 respondents)

Margin of error for The Black Country: +/-4% to 6% (276 respondents)

Margin of error for Coventry and Warwickshire: +/-4% to 7% (257 respondents)

Margin of error for Shropshire, T&W, Worcestershire and Herefordshire: +/-2% to 4% (1,539 respondents)

Margin of error for Stoke, North Staffs and South Staffs: +/- 3% to 5% (1,100 respondents)

People in The Black Country (81%) were the most likely to have visited a dentist on the NHS compared with those who live elsewhere in the West Midlands. The figures for all other areas were relatively similar (between 66% and 71%).

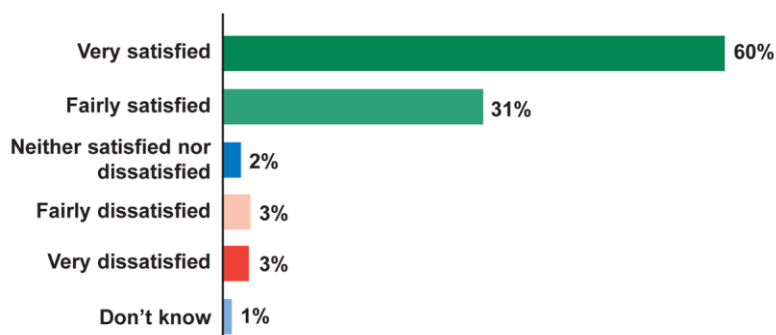
5. Satisfaction with dental care

People who had visited a dentist were asked how satisfied or dissatisfied they had been with the care they received on that occasion.

The bar chart below shows the results for the West Midlands region as a whole.

5.1 REGIONAL RESULT FOR THE WEST MIDLANDS AS A WHOLE

Question: How satisfied or dissatisfied were you with the care you received?



Base: 3,477 people who said they had visited a dentist
Margin of error: +/- 2% to 3%

As many as 60% of people who had visited a dentist said they were very satisfied with the care they received, whilst 31% described themselves as fairly satisfied. These figures compared with just 3% who were very dissatisfied and 3% who were fairly dissatisfied.

In other words, as the bar chart below illustrates, 91% of people were satisfied overall compared with 6% who were dissatisfied. When those who were dissatisfied to varying degrees are subtracted from those who were satisfied to varying degrees, we arrive at a 'net satisfaction' figure of 85%.

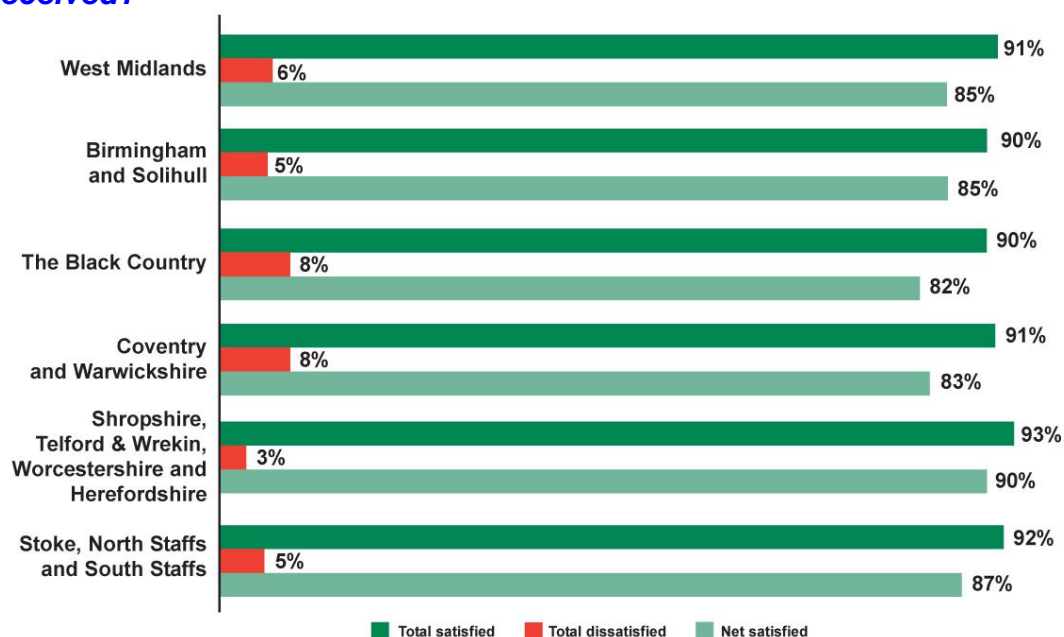


Base: 3,477 people who said they had visited a dentist
Margin of error: +/- 2% to 3%

5.2 COMPARING THE OVERALL WEST MIDLANDS RESULT WITH RESULTS FROM SPECIFIC AREAS

Here, the results for the West Midlands as a whole are compared with those for five geographical areas within the region.

Question: How satisfied or dissatisfied were you with the care you received?



Margin of error for West Midlands: +/- 2% to 3% (3,477 respondents)

Margin of error for Birmingham and Solihull: +/- 4% to 6% (315 respondents)

Margin of error for The Black Country: +/-4% to 6% (276 respondents)

Margin of error for Coventry and Warwickshire: +/-4% to 7% (257 respondents)

Margin of error for Shropshire, T&W, Worcestershire and Herefordshire: +/-2% to 4% (1,529 respondents)

Margin of error for Stoke, North Staffs and South Staffs: +/- 3% to 5% (1,100 respondents)

The percentage of people who said they were satisfied with the care they received on their last visit to the dentist was very similar across all parts of the region, ranging from 90% to 93%.

However, there were significant differences between geographical areas in the proportions of people saying they were 'very satisfied'. The highest proportion was in Coventry and Warwickshire (68%) and the lowest proportion was in Birmingham and Solihull (51%).

Net satisfaction rates were relatively similar (from 82% to 90%). Statistical margins of error may account for those differences.

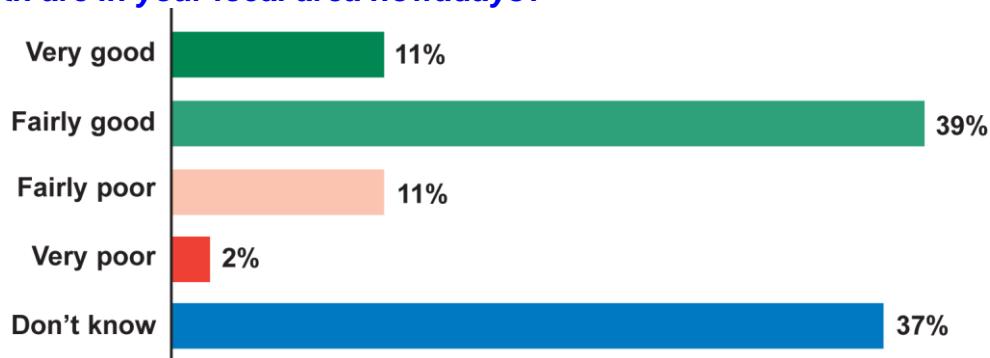
6. Whether people think children's teeth are good or poor in their area

After answering a series of questions about their personal dental care, people taking part in the survey were then asked whether they thought children's teeth in their area was good or poor.

The first bar chart below shows how many of them across the West Midlands as a whole thought children's teeth in their local area were very good, fairly good, fairly poor or very poor.

6.1 REGIONAL RESULT FOR THE WEST MIDLANDS AS A WHOLE

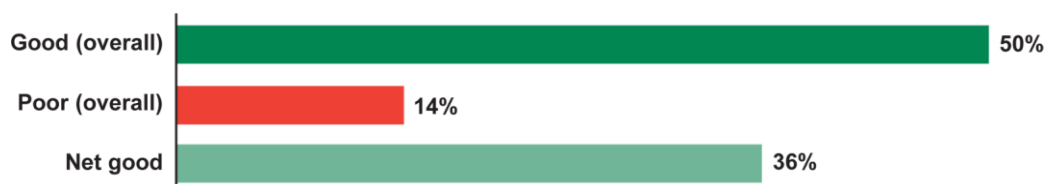
Question: *In your opinion, how good or poor would you say children's teeth are in your local area nowadays?*



Quota sample of 3,516 residents aged 16+ of the West Midlands region
Margin of error: +/- 2% to 3%

As we can see from the bar chart above, 11% of people across the West Midlands thought that children's dental health in their local area was very good and 39% thought it was fairly good. Only 2% thought it was very poor, whilst 11% thought it was fairly poor.

The bar chart below compares those who thought local children's dental health was good (to varying degrees) with those who thought it was poor (to varying degrees). When those who thought it was poor are subtracted from those who thought it was good, we arrive at a 'net good' figure of 36%.



Quota sample of 3,516 residents aged 16+ of the West Midlands region
Margin of error: +/- 2% to 3%

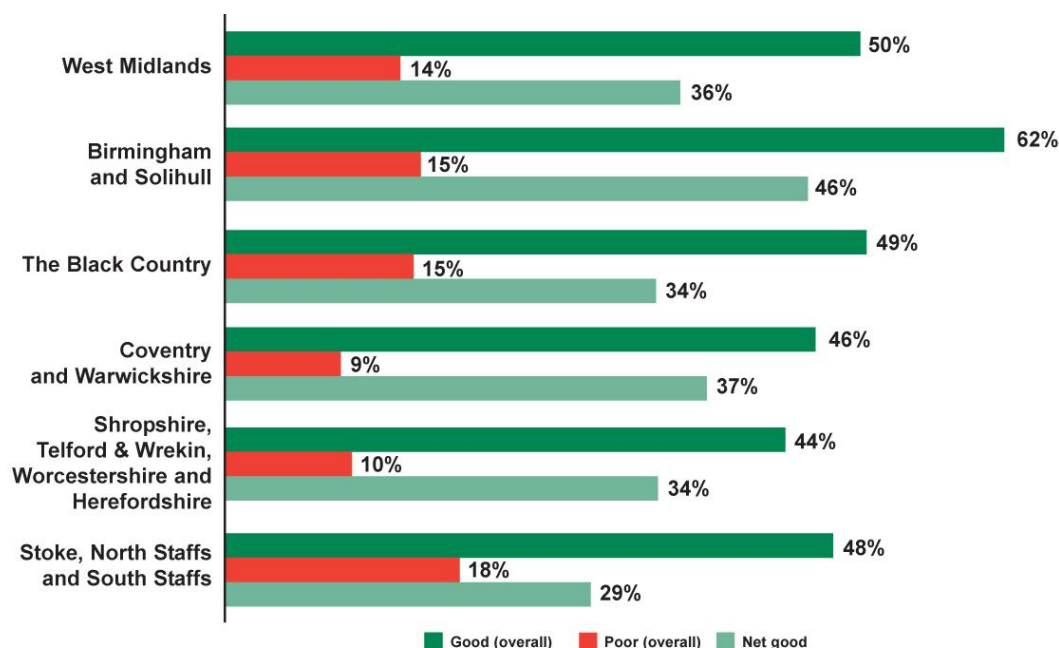
Over the region as a whole around 4 out of every 10 people (37%) interviewed for the survey did not know whether children's dental health was good or poor in their local area. More than 5 out of 10 people aged 65 and over (54%) said they did not know, compared with only 3 out of 10 (28%) of those aged 16 to 24.

Women were slightly more inclined than men (53% compared with 46%) to think that children's dental health in their area was either fairly good or very good. This is not because men were more likely to say it was poor. Rather, there were many more 'don't knows' among men (42%) than women (31%). People aged 55 and over seemed less inclined than those in other age groups to think that children's dental health was good.

6.2 COMPARING THE OVERALL WEST MIDLANDS RESULT WITH RESULTS FROM SPECIFIC AREAS

The bar chart below compares the results for the West Midlands as a whole with those for five geographical areas within the region.

Question: In your opinion, how good or poor would you say children's teeth are in your local area nowadays?



Margin of error for West Midlands: +/- 2% to 3% (3,516 respondents)

Margin of error for Birmingham and Solihull: +/- 4% to 6% (322 respondents)

Margin of error for The Black Country: +/-4% to 6% (282 respondents)

Margin of error for Coventry and Warwickshire: +/-4% to 7% (262 respondents)

Margin of error for Shropshire, T&W, Worcestershire and Herefordshire: +/-2% to 4% (1,543 respondents)

Margin of error for Stoke, North Staffs and South Staffs: +/- 3% to 5% (1,107 respondents)

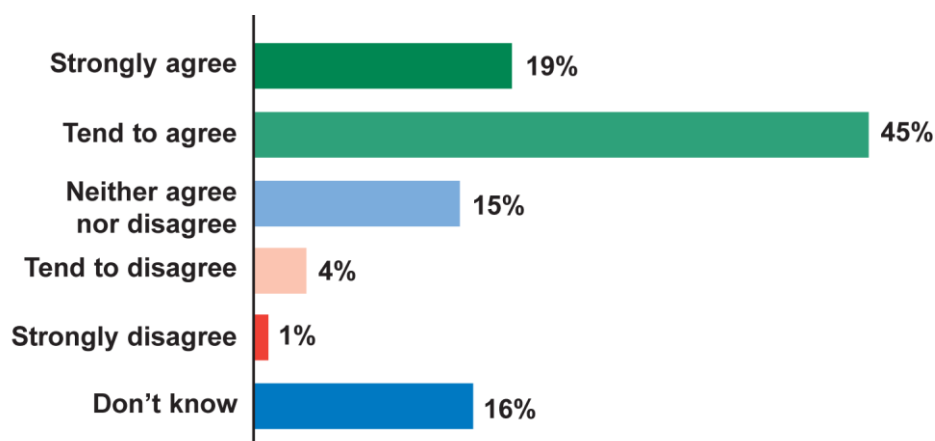
The survey suggests that people from Birmingham and Solihull (62%) were the most likely to think that local children's dental health was good. By contrast, residents in Stoke and Staffordshire (18%) appeared more likely than those from the rest of the region to think that local children's dental health was poor.

7. Whether people think fluoride helps to reduce tooth decay

The next question is about fluoride in a very general sense. People were asked how far they agreed – or disagreed – that fluoride helps to reduce their risk of tooth decay. Specifically, they were asked to say whether they strongly agreed or disagreed with the statement about fluoride, or whether they just tended to agree or disagree with it. The bar chart below shows the responses across the region as a whole.

7.1 REGIONAL RESULT FOR THE WEST MIDLANDS AS A WHOLE

Question: *To what extent, if at all, do you agree or disagree with the following statement: Fluoride helps to reduce your risk of tooth decay?*



Quota sample of 3,516 residents aged 16+ of the West Midlands region
Margin of error: +/- 2% to 3%

These figures show that 19% of people strongly agreed with the statement that fluoride helps to reduce tooth decay, with a further 45% tending to agree. Only 1% disagreed strongly, whilst 4% tended to disagree.

Those aged 35 to 64 were more likely to think that fluoride reduces the risk of tooth decay than those aged 16 to 34 or 65 and over.

Around three of out ten (31%) of people interviewed said either that they did not know whether fluoride reduces the risk of tooth decay or did not feel able to agree or disagree with the statement that it *does* reduce the risk.

The bar chart below shows that 64% (nearly two thirds) of people agreed to varying degrees that fluoride helps to reduce tooth decay, compared with just 5% who disagreed. When those who disagreed are subtracted from those who agreed, it gives a 'net agree' figure of 58%.

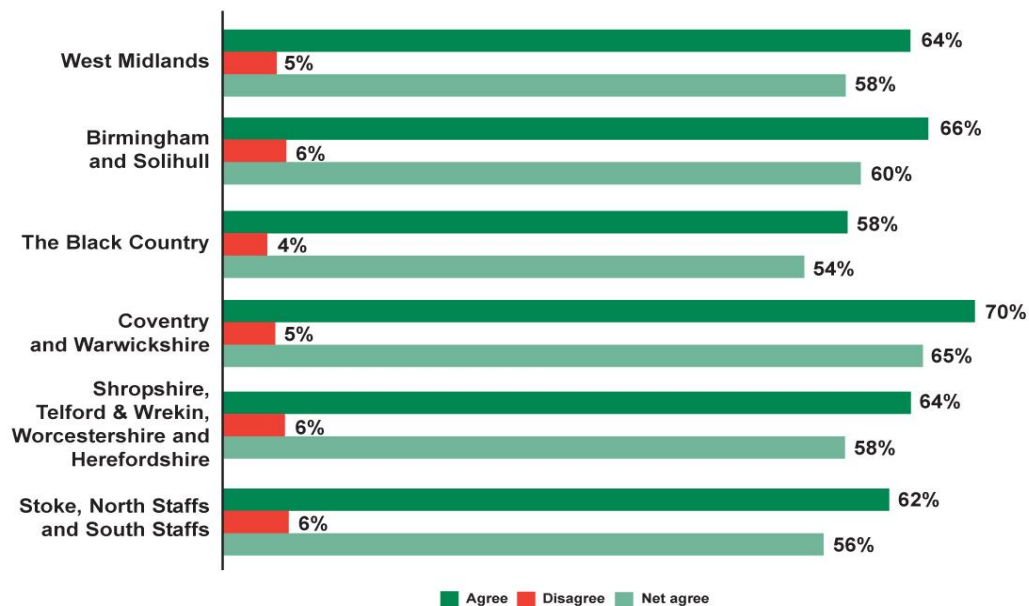


Quota sample of 3,516 residents aged 16+ of the West Midlands region
 Margin of error: +/- 2% to 3%

7.2 COMPARING THE OVERALL WEST MIDLANDS RESULT WITH RESULTS FROM SPECIFIC AREAS

The bar chart below compares the results for the West Midlands as a whole with those for five geographical areas within the region.

Question: To what extent, if at all, do you agree or disagree with the following statement: Fluoride helps to reduce your risk of tooth decay?



Margin of error for West Midlands: +/- 2% to 3% (3,516 respondents)
 Margin of error for Birmingham and Solihull: +/- 4% to 6% (322 respondents)
 Margin of error for The Black Country: +/-4% to 6% (282 respondents)
 Margin of error for Coventry and Warwickshire: +/-4% to 7% (262 respondents)
 Margin of error for Shropshire, T&W, Worcestershire and Herefordshire: +/-2% to 4% (1,543 respondents)
 Margin of error for Stoke, North Staffs and South Staffs: +/- 3% to 5% (1,107 respondents)

Across the different parts of the West Midlands between 58% (The Black Country) and 70% (Coventry and Warwickshire) agreed wholly or to some extent with the statement that fluoride helps to reduce your risk of tooth decay. Net agreement levels were generally between 54% and 60%, although in Coventry and Warwickshire the figure was 65%.

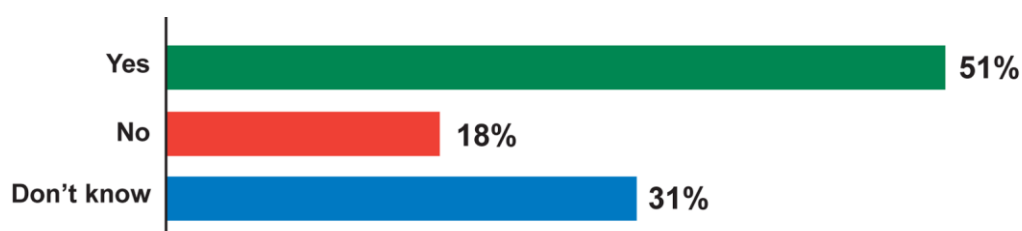
8. Whether people think it's possible to reduce tooth decay by adding fluoride to the water they drink

This is the first question in the survey about water fluoridation. Specifically, people were asked whether they thought it was possible to reduce tooth decay by adding fluoride to the water they drink.

The following bar chart gives the results for the West Midlands as a whole.

8.1 REGIONAL RESULT FOR THE WEST MIDLANDS AS A WHOLE

Question: *Do you think it is possible to reduce tooth decay by adding fluoride to the water people drink?*



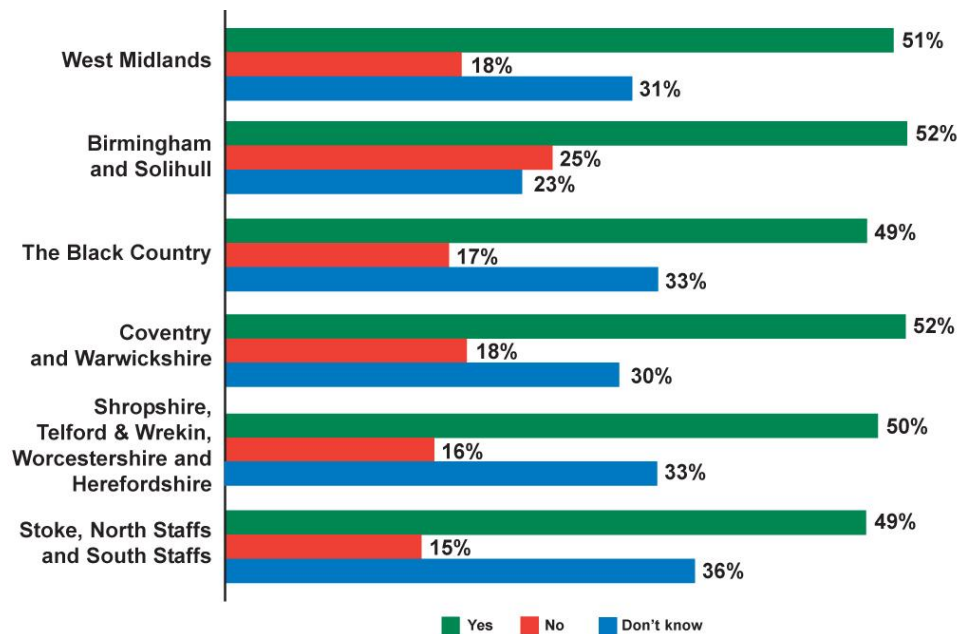
Quota sample of 3,516 residents aged 16+ of the West Midlands region
Margin of error: +/- 2% to 3%

Just over half (51%) of the people interviewed thought it was possible to reduce tooth decay by adding fluoride to the water people drink, compared with 18% who thought that it was not possible. Around three in ten (31%) did not know.

8.2 COMPARING THE OVERALL WEST MIDLANDS RESULT WITH RESULTS FROM SPECIFIC AREAS

The bar chart below compares the results for the West Midlands as a whole with those from five geographical areas within the region.

Question: Do you think it is possible to reduce tooth decay by adding fluoride to the water people drink?



Margin of error for West Midlands: +/- 2% to 3% (3,516 respondents)

Margin of error for Birmingham and Solihull: +/- 4% to 6% (322 respondents)

Margin of error for The Black Country: +/-4% to 6% (282 respondents)

Margin of error for Coventry and Warwickshire: +/-4% to 7% (262 respondents)

Margin of error for Shropshire, T&W, Worcestershire and Herefordshire: +/-2% to 4% (1,543 respondents)

Margin of error for Stoke, North Staffs and South Staffs: +/- 3% to 5% (1,107 respondents)

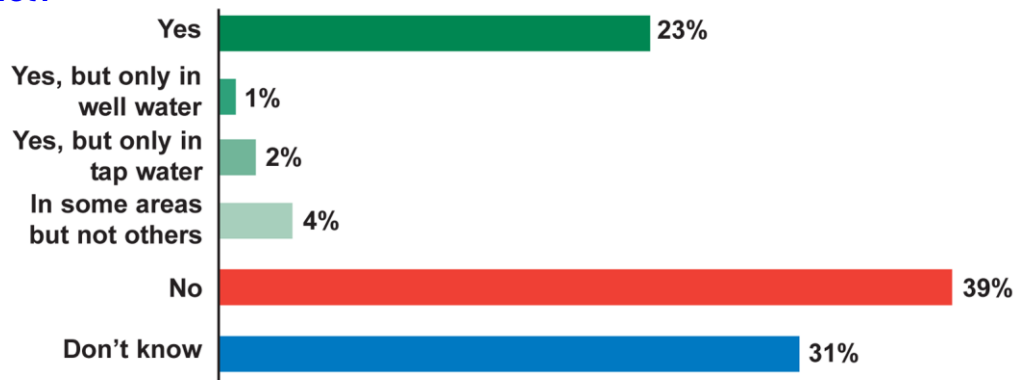
Across all parts of the region about the same proportion of people (between 49% and 52%) thought that adding fluoride to water could reduce tooth decay. The biggest variation was in the proportion of 'don't knows', which fluctuated between 23% in Birmingham and Solihull and 36% in Stoke and Staffordshire.

9. Whether people think fluoride is present naturally in water

People were then asked whether they thought fluoride was present in water naturally. The bar chart below gives the results for the West Midlands as a whole.

9.1 REGIONAL RESULT FOR THE WEST MIDLANDS AS A WHOLE

Question: Do you think there is fluoride present naturally in water, or not?



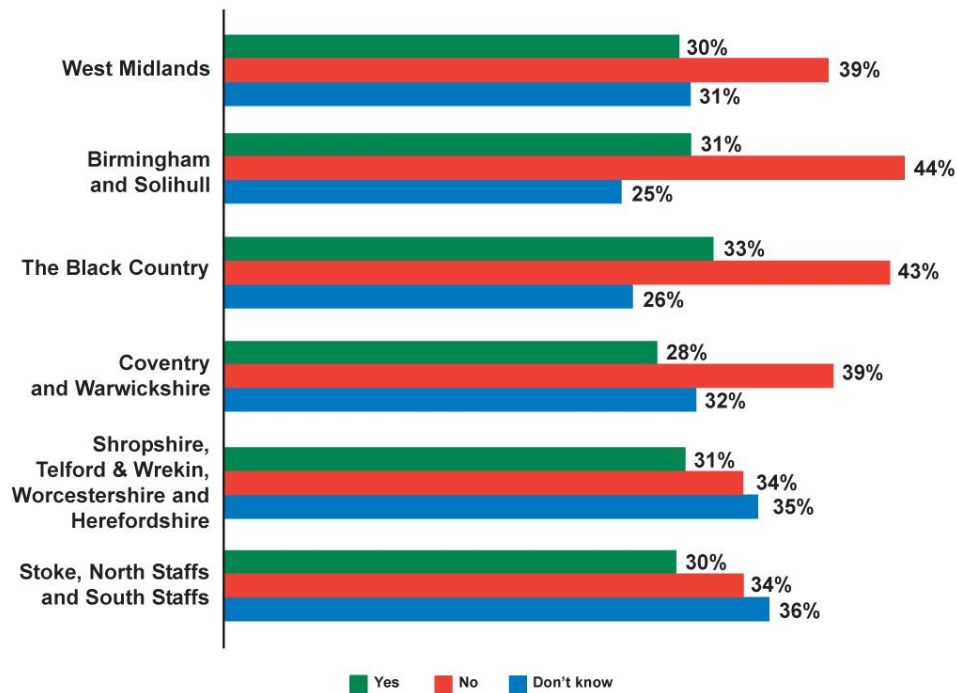
Quota sample of 3,516 residents aged 16+ of the West Midlands region
Margin of error: +/- 2% to 3%

Around three in ten people (31%) interviewed for the survey thought there was fluoride present naturally either in all water supplies or some of them, whilst 39% thought there was no fluoride present naturally in water and 31% said they did not know.

9.2 COMPARING THE OVERALL WEST MIDLANDS RESULT WITH RESULTS FROM SPECIFIC AREAS

The bar chart below compares the results for the West Midlands as a whole with those from five geographical areas within the region.

Question: Do you think there is fluoride present naturally in water, or not?



Margin of error for West Midlands: +/- 2% to 3% (3,516 respondents)

Margin of error for Birmingham and Solihull: +/- 4% to 6% (322 respondents)

Margin of error for The Black Country: +/-4% to 6% (282 respondents)

Margin of error for Coventry and Warwickshire: +/-4% to 7% (262 respondents)

Margin of error for Shropshire, T&W, Worcestershire and Herefordshire: +/-2% to 4% (1,543 respondents)

Margin of error for Stoke, North Staffs and South Staffs: +/- 3% to 5% (1,107 respondents)

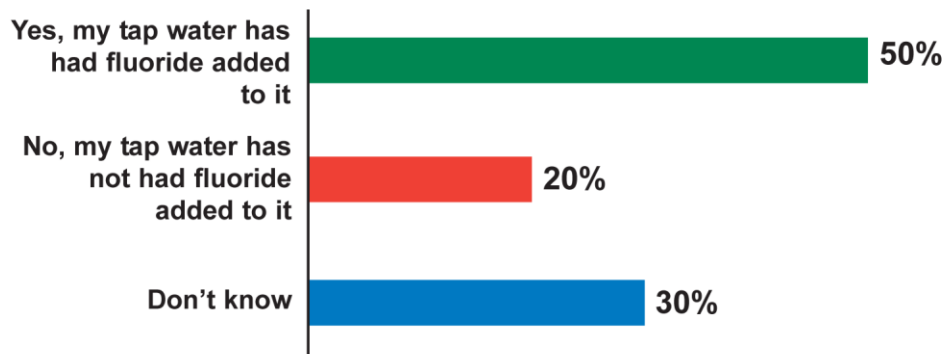
People in Birmingham and Solihull and The Black Country were slightly more likely than those in other parts of the region to think that there was no fluoride present naturally in water. However, these differences should be treated as indicative only, as they are not statistically significant.

10. Whether people think fluoride has been added to their water supply

The next question people were asked was whether they thought fluoride had been added to their water supply at home. The bar chart below gives the results for the region as a whole.

10.1 REGIONAL RESULT FOR THE WEST MIDLANDS AS A WHOLE

Question: Do you think your tap water at home has had fluoride added to it, or not?



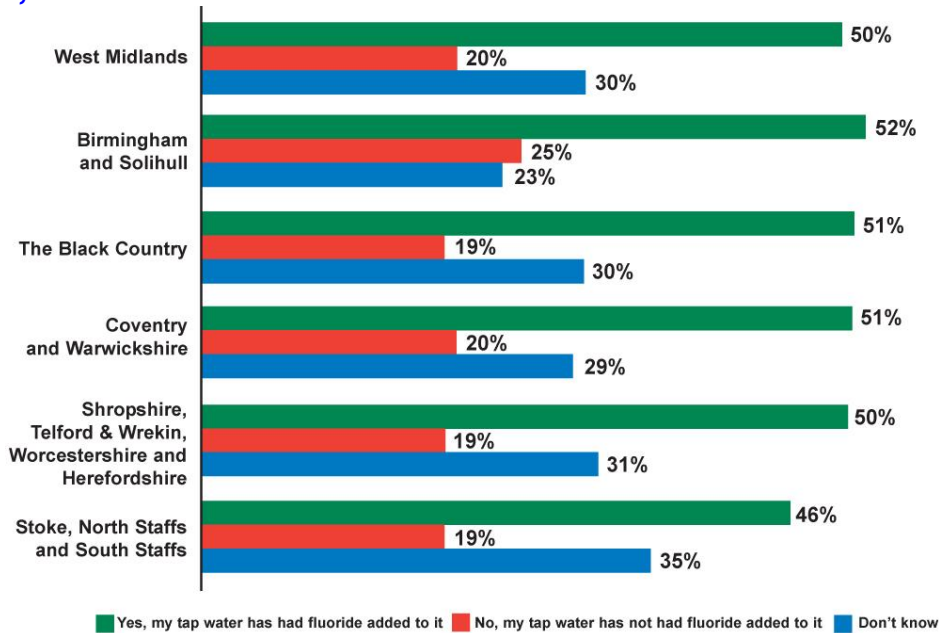
Quota sample of 3,516 residents aged 16+ of the West Midlands region
Margin of error: +/- 2% to 3%

Exactly half the number of people interviewed thought fluoride had been added to their tap water at home, compared with 20% who thought it had not been added and 30% who did not know. People aged 35 and over – and especially those between 55 and 64 – were the most likely to think their water is fluoridated. Those aged 16 to 34 were the most likely to think that their water is not fluoridated.

10.2 COMPARING THE OVERALL WEST MIDLANDS RESULT WITH RESULTS FROM SPECIFIC AREAS

The bar chart below compares the results for the West Midlands as a whole with those from five geographical areas within the region.

Question: Do you think your tap water at home has had fluoride added to it, or not?



Margin of error for West Midlands: +/- 2% to 3% (3,516 respondents)

Margin of error for Birmingham and Solihull: +/- 4% to 6% (322 respondents)

Margin of error for The Black Country: +/-4% to 6% (282 respondents)

Margin of error for Coventry and Warwickshire: +/-4% to 7% (262 respondents)

Margin of error for Shropshire, T&W, Worcestershire and Herefordshire: +/-2% to 4% (1,543 respondents)

Margin of error for Stoke, North Staffs and South Staffs: +/- 3% to 5% (1,107 respondents)

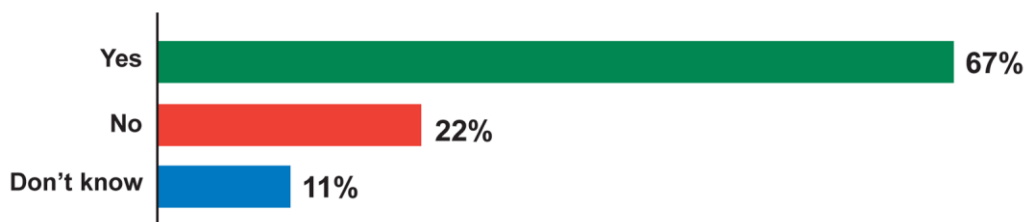
There is very little variation between geographical areas in the proportions of people who thought fluoride had been added to their tap water (between 46% and 53%). The differences could be explained by statistical margins of error. The highest proportion of 'don't knows' (35%) was in Stoke and Staffordshire.

11. Whether people think fluoride should be added to water if it can reduce tooth decay

People were asked whether they think fluoride should be added to tap water on the basis of broad scientific agreement that doing this reduces tooth decay. The bar chart below shows the results for the West Midlands as a whole.

11.1 REGIONAL RESULT FOR THE WEST MIDLANDS AS A WHOLE

Question: There is broad scientific agreement that adding fluoride to tap water reduces tooth decay. On this basis, do you think fluoride should be added to tap water?



Quota sample of 3,516 residents aged 16+ of the West Midlands region
Margin of error: +/- 2% to 3%

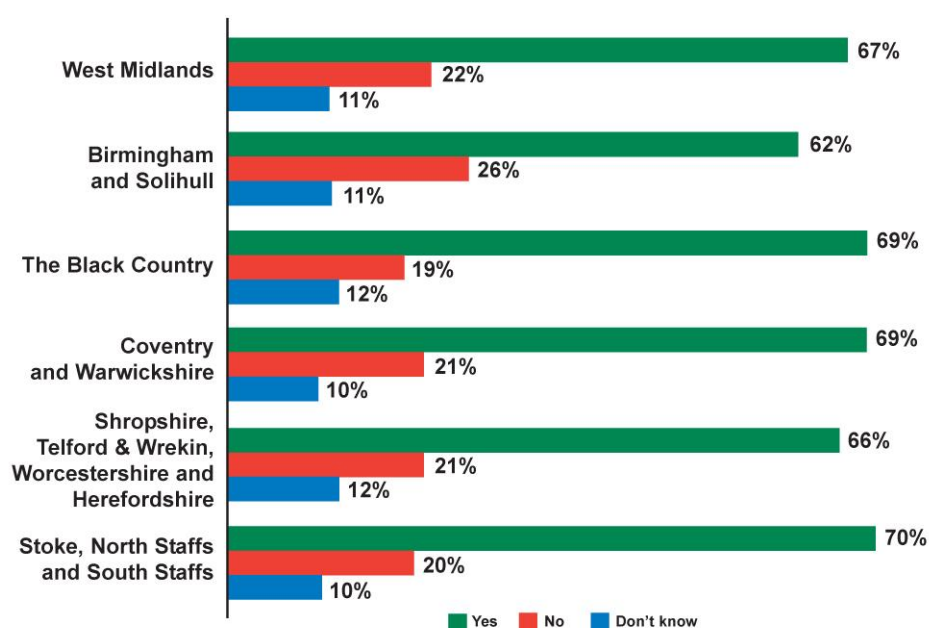
A majority of people (67%) interviewed for the survey thought fluoride should be added to water on the basis that it reduces tooth decay, compared with 22% who thought it should not be added.

There was a clear majority in favour among men and women and across all age groups. The highest level of support (72%) was among 16 to 24 year olds, although this is not statistically significant.

11.2 COMPARING THE OVERALL WEST MIDLANDS RESULT WITH RESULTS FROM SPECIFIC AREAS

The bar chart below compares the results for the West Midlands as a whole with those from five geographical areas within the region.

Question: *There is broad scientific agreement that adding fluoride to tap water reduces tooth decay. On this basis, do you think fluoride should be added to tap water?*



Margin of error for West Midlands: +/- 2% to 3% (3,516 respondents)

Margin of error for Birmingham and Solihull: +/- 4% to 6% (322 respondents)

Margin of error for The Black Country: +/-4% to 6% (282 respondents)

Margin of error for Coventry and Warwickshire: +/-4% to 7% (262 respondents)

Margin of error for Shropshire, T&W, Worcestershire and Herefordshire: +/-2% to 4% (1,543 respondents)

Margin of error for Stoke, North Staffs and South Staffs: +/- 3% to 5% (1,107 respondents)

The proportion of people who thought fluoride should be added to water to reduce tooth decay ranged from 62% to 70%. Margins of error need to be taken into account when the results from one part of the region are compared with those from another.

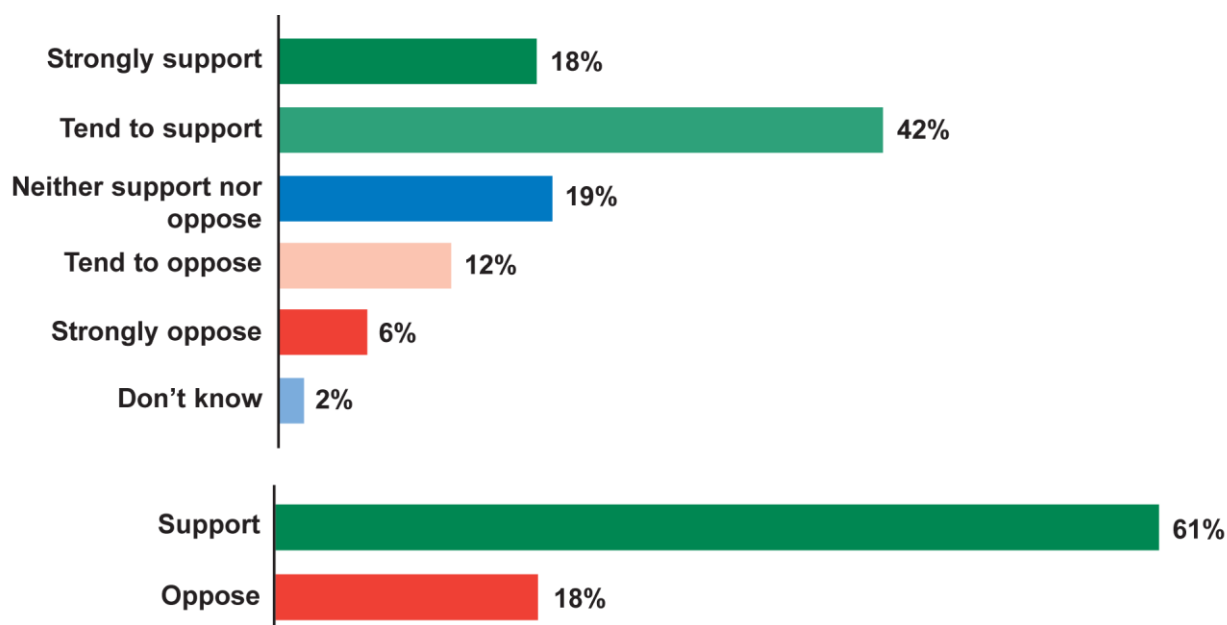
12. The extent to which people support or oppose fluoride being added to tap water

The previous question asked people whether, on the basis of broad scientific agreement on the evidence of benefits, fluoride should be added to water to reduce tooth decay. This question followed up on people's answers by seeking to ascertain *how strongly* they felt about adding – or not adding – fluoride to water. Specifically, they were asked to what extent they supported or opposed fluoride being added to tap water.

The bar chart below shows, for the West Midlands as a whole, how many people strongly supported or tended to support fluoridation, and how many strongly opposed or tended to oppose fluoridation. The two bars at the foot of the chart give overall totals for those who said they supported fluoridation (to whatever degree) and those who said they opposed it (to whatever degree).

12.1 REGIONAL RESULT FOR THE WEST MIDLANDS AS A WHOLE

Question: To what extent do you support or oppose fluoride being added to tap water?



Quota sample of 3,516 residents aged 16+ of the West Midlands region
Margin of error: +/- 2% to 3%

Responses to the previous question showed that there were three times more people in favour of fluoridation (67%) than against it (22%).

Responses to *this* question about the intensity of their support or opposition showed that there were also three times more people (18%) who said they *strongly* supported than those who *strongly* opposed it (6%). Among those who tended to support or tended to oppose fluoridation, the difference was even greater (42% compared with 12%).

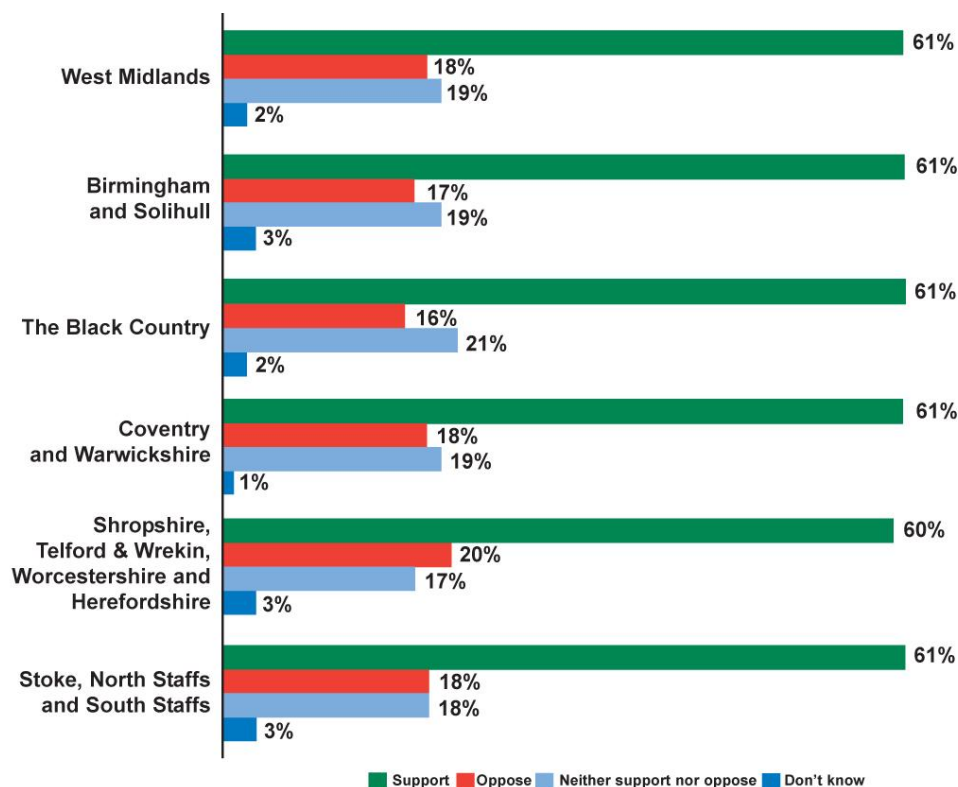
When we look at *all those who supported fluoridation* (i.e., when we combine the figures for those who strongly supported it and those who tended to support it), the difference was 61% in favour compared with 18% against.

There were majorities who strongly support or tend to support fluoridation among both men and women and across all age groups. The largest majority was found among 35s to 44s and among 55s to 64s, although this was not statistically significant. The lowest majority was among over-75s, where as many as 25% said they neither supported nor opposed fluoridation.

12.2 COMPARING THE OVERALL WEST MIDLANDS RESULT WITH RESULTS FROM SPECIFIC AREAS

The bar chart below compares the results for the West Midlands as a whole with those from five geographical areas within the region.

Question: To what extent do you support or oppose fluoride being added to tap water?



Margin of error for West Midlands: +/- 2% to 3% (3,516 respondents)

Margin of error for Birmingham and Solihull: +/- 4% to 6% (322 respondents)

Margin of error for The Black Country: +/-4% to 6% (282 respondents)

Margin of error for Coventry and Warwickshire: +/-4% to 7% (262 respondents)

Margin of error for Shropshire, T&W, Worcestershire and Herefordshire: +/-2% to 4% (1,543 respondents)

Margin of error for Stoke, North Staffs and South Staffs: +/- 3% to 5% (1,107 respondents)

Overall, levels of support for fluoridation were fairly consistent across the region, as were levels of opposition.

The highest percentage of people who said they strongly supported fluoridation appears to be in the Birmingham and Solihull area, although this is not statistically significant.

13. Why 67% of people think fluoride should be added to tap water

The people interviewed in the survey who said fluoride should be added to tap water (67% of the total sample) were spontaneously asked *why* they held this opinion. Their verbatim responses were recorded, with common themes identified so that results could be tabulated.

The five most frequently cited reasons by this group of interviewees were:

- * It prevents/combats/reduces tooth decay (37%).
- * It is good for dental health/helps your teeth (18%).
- * It is good for children's teeth (8%).
- * It has benefits (8%).
- * The scientific evidence demonstrates its effectiveness (7%).

Only 3 people out of around 2,300 who were asked this question said they supported fluoridation because there were not enough dentists, while 7 people said it would help reduce their dental bills. *Please note that we have highlighted some relevant findings here. A full list of the responses can be found in the appendix to this report.*

14. Why 22% of people think fluoride should not be added to tap water

The people interviewed in the survey who said fluoride should not be added to tap water (22% of the total sample) were asked *why* they held this opinion.

The five most commonly cited reasons by this group of interviewees were:

- * Water should be natural/contain no additives (20%).
- * People should have a choice (18%).
- * Risk of side effects/health-related issues (13%).
- * It alters the taste of the water (9%).
- * Fluoride is already in people's toothpaste (6%).

Only 5 people out of around 760 said they objected to fluoridation because it was, in their opinion, a form of mass medication. One person said they opposed it because it only benefited children, not adults, while 4 people thought it was no good for children. *Please note that we have highlighted some relevant findings here. A full list of the responses can be found in the appendix to this report.*

15. What would help the 11% of people who are undecided about water fluoridation to make up their minds

About one in ten of the people (11%) interviewed in the survey responded 'don't know' when asked whether fluoride should be added to tap water. They were then asked what, if anything, would help them to decide.

The largest single group among those who were undecided on the issue (38%) said they did not know what would help them to decide. Out of the remainder, the most commonly given suggestions were: scientific research; more information; and knowing more about possible benefits and risks.

16. Where people would look for more information about fluoride

Everyone interviewed for the survey was asked which sources of information they would use if they wanted to find out more about fluoride being added to water. The largest proportion of respondents (61% of the total) said they would use the internet, while 26% said they would seek information from health organisations and 17% would ask their water company.

The internet was the main source of information cited by a majority of people in most age groups except the over-75s. Among the over-75s, the internet was cited by only 15%. Older people, it seems, would be much more likely to look to health organisations and the water company, although this finding is not statistically significant.

Given that over half of those interviewed would turn in the first instance to the internet for more information about fluoridation, this survey report has been published on the Strategic Health Authority's website. Information about water fluoridation is included as an appendix to the report.

17. Appendix: regional topline results

Ipsos MORI

NHS
West Midlands

Ipsos MORI/JN0802783801

Dental health
NHS West Midlands
Final topline results, 10 May 2010

Results for NHS West Midlands are based on 3,516 respondents interviewed across the West Midlands region.

Fieldwork carried out face-to-face, in-home, throughout the area bounded by NHS West Midlands, between 16 December 2009 and 24 March 2010.

Where results do not sum to 100%, this may be due to computer rounding, multiple responses, or to the exclusion of don't knows or non-responses.

An asterisk (*) indicates a finding of less than half of one per cent, but greater than zero.

Results are weighted to population information from the Census, using 2008 ONS mid-year estimates, by PCT population size and within each PCT by age, gender, working status and ethnicity.

Base: All adults 16+ unless otherwise stated.

Q1. When was the last time you visited a dentist? SINGLE CODE ONLY

	%
Within the last 12 months	69
Over 12 months up to 2 years ago	13
Longer ago	16
Never	2
Don't know	*

Q2. And was that on the NHS? SINGLE CODE ONLY

Base: All those who have ever visited a dentist

	(3,477) %
Yes	71
No	28
Don't know	1

- Q3. SHOWCARD A (R) **And how satisfied or dissatisfied were you with the care you received?** SINGLE CODE ONLY

Base: All those who have ever visited a dentist

	(3,477)
	%
Very satisfied	60
Fairly satisfied	31
Neither satisfied nor dissatisfied	2
Fairly dissatisfied	3
Very dissatisfied	3
Don't know	1

PERCEPTIONS OF CHILDREN'S DENTAL HEALTH

- Q4. SHOWCARD B (R) **In your opinion, how good or poor would you say children's teeth are in your local area nowadays?** SINGLE CODE ONLY

	%
Very good	11
Fairly good	39
Fairly poor	11
Very poor	2
Don't know	37

AWARENESS OF LINK BETWEEN FLUORIDE AND TOOTH DECAY

- Q5. SHOWCARD C (R) **To what extent, if at all, do you agree or disagree with the following statement: Fluoride helps to reduce your risk of tooth decay?** SINGLE CODE ONLY

	%
Strongly agree	19
Tend to agree	45
Neither agree nor disagree	15
Tend to disagree	4
Strongly disagree	1
Don't know	16

- Q6. **Do you think it is possible to reduce tooth decay by adding fluoride to the water people drink?** SINGLE CODE ONLY

	%
Yes	51
No	18
Don't know	31

AWARENESS OF EXISTENCE OF NATURAL FLUORIDE IN WATER

Q7. **Do you think there is fluoride present naturally in water, or not? DO NOT PROMPT. SINGLE CODE ONLY**

	%
Yes	23
Yes, but only in well water	1
Yes, but only in tap water	2
No	39
In some areas but not others	4
Other	*
Don't know	31

AWARENESS OF WHETHER LOCAL WATER IS FLUORIDATED

Q8. **Do you think your tap water at home has had fluoride added to it, or not? DO NOT PROMPT. SINGLE CODE ONLY**

	%
Yes, my tap water has had fluoride added to it	50
No, my tap water has not had fluoride added to it	20
Don't know	30

SUPPORT FOR FLUORIDATION

Q9. **There is broad scientific agreement that adding fluoride to tap water reduces tooth decay. On this basis do you think fluoride should be added to tap water? SINGLE CODE ONLY**

	%
Yes	67
No	22
Don't know	11

Q10. **SHOWCARD D (R) To what extent do you support or oppose fluoride being added to tap water? SINGLE CODE ONLY**

	%
Strongly support	18
Tend to support	42
Neither support nor oppose	19
Tend to oppose	12
Strongly oppose	6
Don't know	2
Support (combination strongly / tend to support)	61
Oppose (combination tend to / strongly oppose)	18

Q11. **Why do you think fluoride should be added to tap water?** PROBE FULLY AND WRITE IN.

Base: All who say fluoride should be added to tap water

	(2,297)
)
	%
Prevents / combats / reduces tooth decay	37
Good dental health / helps your teeth	18
Good / better for children's teeth	8
Has benefits / good benefits / helps (unspecified)	8
Scientifically proven / evidence demonstrates its effectiveness	7
As long as it has no side effects	4
Good idea / agree with the proposal	3
Kids / adults / people don't brush their teeth properly / take care of their teeth	3
Negative mentions	3
Good for / improves (general) health	2
Good for you / people / populations	2
Accessible / easy to get into people	2
Protects teeth	2
Reduces / prevents / tooth (unspecified)	2
No need to go to the dentist	1
Kids / adults / people eat / drink badly	1
Better for NHS / reduces NHS bills	1
Gives stronger teeth	1
This area already has fluoride in the water	1
Need more information / don't know enough	1
Needs to be monitored / controlled / only need small amounts	1

Q11. **Why do you think fluoride should be added to tap water?** PROBE FULLY AND WRITE IN.

Cont'd

Base: All who say fluoride should be added to tap water

	(2,297)
	%
Heard good reports / things / read in the papers	1
Prevents tooth loss / preserves the life of teeth	1
Other positive benefits	1
As long as it doesn't alter the taste / positive taste mentions	1
Can't see the difference in people's teeth of those who do and do not have it in their water	1
Cheap / saves money	1
Good for dental / oral hygiene	1
Purifies / cleans / improves water	1
Kills germs	*
Recommended by specialists / dentists	*
Good for gums / prevents gum disease	*
Fluoride is already in toothpaste	*
Should have choice	*
Reduces dental bills	*
Prevention better than cure	*
Good for bones	*
Encourages you / people / children to drink water	*
Prevents fillings	*
Not enough dentists / makes dentists' life easier	*
People don't visit the dentist enough	*
Other	1
Don't know	6

Q12. **Why do you think fluoride should not be added to tap water? PROBE FULLY AND WRITE IN.**

Base: All who say fluoride should not be added to tap water

(823

)

%

Water should be natural / no additives / already enough chemicals in water	20
People should have a choice	18
Possible risks / side / long-term effects / health related issues	13
Alters the taste of the water / unpleasant taste	9
Fluoride is in toothpaste / people should use fluoride added toothpaste / other alternatives available	6
More evidence / proof / research is needed	4
Positive mentions	4
Don't know what it does / enough	4
Don't need it / don't think it helps / makes no difference	3
Can cause teeth problems / negative effect on teeth	3
Harmful / dangerous / poisonous / toxic / by-product of waste	3
People need to take care of their teeth / avoid eating / drinking fizzy drinks	2
May cause allergic reactions	2
Too much / can be bad for you	2
Heard / read bad reports / in the media	1
Controversial information / needs to be consistent / the same each time	1
Need to carefully watch dosage / no way of telling how much someone is having	1
It is a process of mass medication	1
Never had it before / not been used elsewhere	1
Adds to problems	*
Not good for children	*
Already have / in our water	*
Easy / lazy way out	*
Need to better educate people	*
Taints / spoils water	*
Good for children only / but not for adults	*
Other	3
Don't know	12

Q13. **What, if anything, would help you to decide whether you think fluoride should be added to tap water or not? PROBE FULLY AND WRITE IN.**

Base: All who say they don't know whether fluoride should be added to tap water

(396)

%

Scientific research / proof / medical evidence	22
More information (unspecified)	15
Would want to know more about risks / side effects	9
If it's going to work / help / has benefits	5
Need more information about benefits / pros and cons	4
Good for teeth	3
The taste	3
Good for / minimises dental decay	2
Levels of fluoride in the water	2
Don't know enough about it	1
Having a choice	1
Nothing	1
Other	3
Don't know	38

INFORMATION SOURCES

Q14. If you wanted to find out anything about fluoride being added to tap water, what sources of information would you use? DO NOT PROMPT. MULTICODE OK

	%
FROM HEALTH ORGANISATIONS	26
From my dentist	18
Directly from my GP	5
Department of Health	3
From another local health organisation	1
Leaflets from GP surgery	1
NHS Direct	1
From my pharmacy/chemist	*
From my PCT (Primary Care Trust)	*
BY WORD-OF-MOUTH / EXPERIENCE	3
From friends / family	1
General conversation	1
From people who work in the NHS	*
Personal experience	*
MEDIA	62
Local press	1
Local radio	*
Local TV	*
National press	*
National radio	*
National TV	*
Internet (unspecified)	55
NHS Choices website (specified)	*
NHS websites (unspecified)	1
Other websites	5
OTHER	
Independent sources	*
Survey / market research	*
Library	3
Pressure groups / interest groups	*
From my water company	17
The National Fluoride Information Centre	*
The British Fluoridation Society	*
The British Dental Association	1
Citizens Advice Bureau	*
Council / authority	*
Google	*
Governmental organisations	*
Journals	*
Other	1
Don't know	7
I wouldn't want to find out / I wouldn't do it	1

DEMOGRAPHICS

QA. Gender

	%
Male	49
Female	51

QB. Can I ask how old you are?

	%
16-24	15
25-34	15
35-44	17
45-54	17
55-64	13
65-74	13
75-84	8
85+	1

QC. Class

	%
A	3
B	18
C1	29
C2	21
D	17
E	12

QD. Respondent is:

	%
Chief Income Earner	62
Not Chief Income Earner	38

QE. SHOWCARD E Which of the items on this card best applies to you? Please just read out the letter that applies. SINGLE CODE ONLY

	%
Working - Full time (30+ hrs)	40
- Part-time (9-29 hrs)	8
Working (under 9 hrs)	*
Houseperson	8
Retired	27
Registered unemployed	6
Unemployed but not registered	2
Permanently sick/disabled	2
On a training scheme	*
Voluntary work	*
Student	6
Other	*

QF. SHOWCARD F Which ethnic group do you consider you belong to? SINGLE CODE ONLY

	%
WHITE	
British	84
Irish	1
Any other white background	3
MIXED	
White and Black Caribbean	*
White and Black African	*
White and Asian	*
Any other mixed background	0
ASIAN OR ASIAN BRITISH	
Indian	4
Pakistani	3
Bangladeshi	*
Any other Asian background	*
BLACK OR BLACK BRITISH	
Caribbean	2
African	1
Any other black background	*
CHINESE OR OTHER ETHNIC GROUP	
Chinese	*
Any other background	*
Refused	*

QG. Parental Status:

Are there any children aged under 16 in your household? SINGLE CODE ONLY

	%
Yes	34
No	66

QH. Source of drinking water:

Do you get your water from the mains, or from a local source such as a well or spring? SINGLE CODE ONLY.

Base: All those living in Herefordshire, Shropshire and North Staffordshire PCTs

	(1,353) %
From the mains	98
From a well	*
From a spring	*
Don't know	0
Not stated	1

Q1. **Dental health:**

SHOWCARD G Looking at this card, how good or poor would you say your teeth are nowadays? SINGLE CODE ONLY

	%
Very good	24
Fairly good	58
Fairly poor	12
Very poor	5
Don't know	1
