The Association of Directors of Public Health Consultation Response

Community water fluoridation expansion in the north east of England

Objectives and Scope

This consultation seeks views on a proposal to request the relevant water company, Northumbrian Water Limited (NWL), to enter into new fluoridation arrangements, and to vary existing agreements, in order to expand community water fluoridation schemes across the north east of England. This is because of the significant and long-standing inequalities in the region and is part of the government's plan to improve dental health.

About ADPH

ADPH is the representative body for Directors of Public Health (DsPH), and is a collaborative organisation, working in partnership with others to strengthen the voice for public health, with a heritage which dates back over 160 years. ADPH works closely with a range of Government departments, including UKHSA and OHID as well as the four CMOs, NHS, devolved administrations, local authorities and national organisations across all sectors to minimise the use of resources as well as maximise our voice.

ADPH aims to improve and protect the health of the population by:

- Representing the views of DsPH on public health policy.
- Advising on public health policy and legislation at a local, regional, national and international level.
- Providing a support network for DsPH to share ideas and good practice.
- Identifying and providing professional development opportunities for DsPH.

Our Position

Response to individual questions

Q1: Do you live, work or study in an area where fluoride is already added to the water?

- Yes
- No
- Don't know

Not applicable.

Q2: Are you employed by an organisation that has an interest in the proposal to expand fluoridation in north east England?

- Yes
- No
- Don't know

If you said yes, how is your organisation affected by the proposal to expand fluoridation in the north east of

England - for example, is it located or does it operate in an area affected by the proposal? (Maximum 100 words)

The Association of Directors of Public Health (ADPH) is the representative body for Directors of Public Health (DsPH), and is a collaborative organisation, working in partnership with others to strengthen the voice for public health. ADPH aims to improve and protect the health of the population by representing the views of DsPH on public health policy and advise on public health policy and legislation at a local, regional and national level. We are therefore responding to this consultation to represent the views of DsPH, both in the North East and across the UK, on the topic of water fluoridation.

Q3: To what extent do you agree or disagree with the proposal to expand water fluoridation to other areas of north east England?

- Strongly agree
- Agree
- Neither agree nor disagree
- Disagree
- Strongly disagree
- Don't know

What are the main reasons for your answer? (Select all that apply)

- Reducing tooth decay
- Reducing the number of dental treatments such as tooth extractions or fillings
- Reducing oral health inequalities
- Reducing costs to the NHS
- Improving other health outcomes
- Concerns about negative health impacts of water fluoridation
- Concerns about the environment
- Ethical arguments
- Other, please specify

Please explain your answers and provide any supporting evidence, including weblinks, you have to support your views. If you selected 'ethical arguments' please explain these. (Maximum 250 words)

The overall evidence from a number of systematic and other reviews of observational and interventional studies describes the following benefits of water fluoridation:

- A significant reduction in both the number of five-year-olds experiencing tooth decay and the number of teeth affected in areas with water fluoridation compared to non-fluoridated areas (OHID, 2022).
- Children and young people in areas with a fluoridation scheme in place are less likely to be admitted to hospital to have teeth removed due to decay than in areas without a scheme. If all children in the most deprived 20% in areas with suboptimal fluoride levels below 0.2ppm instead received water with adjusted fluoride, then approximately 56% of extractions in these areas could be prevented (OHID, 2022).
- Adults living in fluoridated areas may retain more teeth when compared to adults living in non-fluoridated areas and experience less decay (Griffin et al., 2007).
- There is notable inequality in the prevalence of tooth decay between affluent and more deprived

communities. People who live in deprived areas benefit the greatest from receiving fluoridated water, helping to reduce oral health inequalities.

Good oral health is essential for good general health. Although it is not a substitute for limiting dietary sugars, good oral hygiene, and regular dental check-ups, it does have a positive effect even when those are absent. A unique advantage of community water fluoridation is that it benefits people who are difficult to reach with other oral health preventive programmes, who are often the people with the greatest need.

Q4: If you have any scientific evidence or evidence on the cost-benefit analysis for us to consider in our final impact assessment, please provide this. (Maximum 250 words)

Tooth decay is a significant, yet largely preventable, public health issue. It affects people at all stages of life and at optimal levels, there is no evidence for adverse health effects associated with community water fluoridation.

A third of UK adults have obvious tooth decay and there are regional inequalities in children. Almost a quarter of 5-year-olds in England have obvious experience of tooth decay and for many years tooth decay has been the main reason for hospital admission for children between 5-9 years old. In 2021 to 2022, the estimated costs for tooth decay-related extractions for children aged between 0-19 was £50.9 million (NHS England, 2024).

Community water fluoridation should be considered as complementary to other strategies aimed at reducing tooth decay, including oral health promotion programmes, such as ChildSmile in Scotland and Designed to Smile in Wales. Community water fluoridation is cost-effective, has a low environmental impact, and is a sustainable intervention in the prevention of tooth decay. Water fluoridation is the most cost-effective oral health improvement intervention and for every £1 invested into water fluoridation schemes, there are savings of £12.71 after 5 years, and £21.98 after 10 years.

Q5: Is there anything else you would like us to consider in this consultation? (Maximum 250 words)

Surveys conducted in North East England found strong public support for water fluoridation.

Despite this, currently only around 10% of the country receives the benefit of water fluoridation, so it isn't reaching all those who would derive the greatest benefits.

Children and vulnerable adults would benefit the most from community water fluoridation. There would also be positive impacts for other vulnerable people, like those with disabilities. There is substantial evidence to show that people from areas of deprivation or disadvantaged backgrounds experience considerably more dental disease than other residents. Vulnerable groups in society are also more likely to suffer from poor oral health, for example, people with disabilities, people with poor mental health, those in care settings and the frail or older people.

OHID's Health Monitoring Report for England 2022 found that for 3 and 5-year olds there was a reduction in dental decay prevalence and a reduction in the severity of tooth decay with increasing fluoride concentration. In the most deprived 20% of areas, the chance of 5 year old children having cavities was 25% lower in areas with a fluoridation scheme than in areas without.

The UK Chief Medical Officers issued a statement on water fluoridation in September 2021, setting out the view that fluoride in drinking water can substantially reduce hospital admissions for tooth extractions, and that there is strong evidence that water fluoridation is an effective public health intervention for reducing

the prevalence of tooth decay and improving dental health equality across the UK (DHSC, 2021).

References

OHID. 2022. Water fluoridation: Health monitoring report for England 2022. Available at: https://www.gov.uk/government/publications/water-fluoridation-health-monitoring-report-for-england-2022.

Griffin SO et al. 2007. Effectiveness of fluoride in preventing caries in adults. Journal of Dental Research 86:410-5.

NHS England. 2024. Faster, simpler and fairer: our plan to recover and reform NHS dentistry. Available at: Faster, simpler and fairer: our plan to recover and reform NHS dentistry - GOV.UK (www.gov.uk).

DHSC. 2021. Statement on water fluoridation from the UK Chief Medical Officers. Available at: Statement on water fluoridation from the UK Chief Medical Officers - GOV.UK (www.gov.uk).