


Agenda Item 6

		THE HEALTH SCRUTINY COMMITTEE FOR LINCOLNSHIRE	
Boston Borough Council	East Lindsey District Council	City of Lincoln Council	Lincolnshire County Council
North Kesteven District Council	South Holland District Council	South Kesteven District Council	West Lindsey District Council

Open Report on behalf of Derek Ward, Director of Public Health, Lincolnshire County Council

Report to	Health Scrutiny Committee for Lincolnshire
Date:	19 July 2023
Subject:	Water Fluoridation

Summary:

This report sets out the role that fluoride has on oral health, the transfer of power to initiate new water fluoridation schemes, or to vary or terminate existing water fluoridation schemes (from local authorities to the Secretary of State for Health and Social Care) and the current situation with water fluoridation schemes in Lincolnshire.

Actions Required:

The Committee is asked to note the evidence in relation to water fluoridation and oral health, the changes to the legislation on water fluoridation schemes and the current situation with water fluoridation schemes in Lincolnshire.

1. Background

1.1. Fluoride and Oral Health

Oral health is an integral part of general health and wellbeing. Most people are at risk of developing some oral disease (e.g. tooth decay, gum disease) during their lifetime. Poor oral health is almost entirely preventable and, despite good progress over the last few decades, it remains a significant cause of pain, discomfort and disfigurement, also impacting on quality of life. Despite improvements in oral health, almost a quarter (23.7%) of 5-year-olds in England surveyed in 2022 had experience of tooth decay. There are several reasons why people can suffer tooth decay including a sugary diet and poor dental hygiene.

‘Delivering Better Oral Health: An Evidence Base Toolkit for Prevention’ seeks to ensure a consistent approach to the prevention of oral disease. Adequate use of fluorides has a strong protective effect in preventing tooth decay. Fluoride can be provided by different ways, such as fluoridated drinking water and toothpaste. Water fluoridation has been described as ‘the single most effective public health measure there is for reducing oral health inequalities and tooth decay rates, especially amongst children’.

Fluoride is a mineral that occurs naturally in the environment. It is found in drinking water and seawater, in the soil and in certain foods. A water fluoridation scheme is where fluoride has been added or adjusted to bring it up to around 1mg of fluoride per litre of water, which is a level found to reduce tooth decay levels. The Water Industry Act provides the legal basis for water fluoridation schemes in England.

The Office for Health Improvement and Disparities (OHID) in the Department of Health and Social Care (DHSC) monitors and reports on the health effects of fluoride on people living in areas covered by water fluoridation schemes. The Health Monitoring Report for England (March 2022), supports earlier findings and evidence that water fluoridation, at levels recommended in the UK, is a safe and effective public health measure to reduce dental caries and inequalities in dental health. The report compares data on the health of people living in areas of England who have differing concentrations of fluoride in their drinking water supply. The results found for example, that five-year-olds in areas with a fluoridation scheme in place were less likely to experience dental caries than in areas without a scheme. Also children and young people in areas with a fluoridation scheme in place were less likely to be admitted to hospital to have teeth removed (due to decay) than in areas without a scheme. The Water Fluoridation Health Monitoring Working Group continues to review evidence and will publish a further report within the next four years.

1.2. Extent of Water Fluoridation – Nationally

The British Fluoridation Society ‘The Extent of Water Fluoridation’ Report states that just over 6.1 million people in the UK receive water with a fluoride content, whether naturally occurring or added, that is sufficient to benefit oral health. Around 5.8 million people in different parts of England are supplied with artificially fluoridated water. Overall, this means that about 10% of the total population is supplied with fluoridated water.

1.3. Water Fluoridation Provisions – Change of Responsibilities

The water fluoridation provisions of the Health and Care Act 2022 came into force on 1 November 2022 and in doing so transferred the power to initiate new water fluoridation schemes, or to vary or terminate existing water fluoridation schemes, from local authorities to the Secretary of State for Health and Social Care. Prior to this, local authorities had responsibility, through the Health and Social Care Act 2012 and the Water Industry Act 1991, to propose and consult on new fluoridation schemes and variations to, or termination of, existing schemes. A Policy Paper by the DHSC highlights that local authorities reported difficulties with the process, and the added complication that local authority boundaries are not coterminous with water flows. The Policy paper stated that the water fluoridation provisions in the Bill would

streamline the process for the development of new fluoridation schemes and remove burdens from local authorities.

Generally, to develop new fluoridation schemes, you first need to commission feasibility studies. An initial feasibility study will identify whether a proposed scheme is operable, efficient and should identify any technical barriers or challenges to fluoridate. For example, there could be limited space to install a fluoridation plant at a site or require a new access road for deliveries of fluoride to a fluoridation plant (a 'point of application').

Part of the rationale for the new legislation was to reduce technical challenges as local authority boundaries are not coterminous with water flows. If the water supply crosses into neighbouring authorities it required the involvement of several authorities in the development of schemes, which may be complex and burdensome.

A water company will build a fluoridation plant or plants with one or more points of application to add fluoride to the water. This requires capital investment with everything that goes along with that. The more complex the water network, the more complex the capital work can be. In addition, there can be issues around land ownership, protected buildings, environmental protections, potential archaeological finds, and planning permission that are part of a capital investment of this kind. The whole process can take several years.

Under the Health and Care Act 2022, The Department for Health and Social Care pays for the revenue and capital costs of water fluoridation. The Secretary of State for Health and Social Care has the power to directly introduce, vary or terminate water fluoridation schemes, and so is the ultimate decision-maker on a proposal for fluoridation. The Secretary of State would have to carry out a public consultation before deciding to introduce a new scheme.

The DHSC carried out a public consultation between 8 April and 3 June 2022, seeking views on the process for future water fluoridation consultation. This asked whether future consultations should be limited to individuals living in areas directly affected and bodies with an interest. As a result of the feedback received during the consultation, any future consultation carried out under this instrument will not be restricted to individuals affected and/or bodies with an interest. The Secretary of State will, however, be required to consider, when deciding whether to proceed with the fluoridation proposal in question, whether additional weight should be given to representations made by individuals who would be affected by the proposal and/or bodies with an interest in the proposal. Individuals affected by the proposals are those who reside or work in the area subject to the proposal.

1.4. Extent of Water Fluoridation – Lincolnshire and Strategic Pipeline Developments

Around 250,000 people in Lincolnshire are supplied with artificially fluoridated water, which includes communities in Lincoln, Gainsborough, Sleaford, Grantham, parts of Market Rasen and a large number of rural communities across the west and central areas of the county. Appendix A provides a map showing the provision.

Anglian Water supply the fluoridated water in Lincolnshire. Between 2020 - 2025 Anglian Water are building a strategic pipeline grid, that maximises the use of existing surpluses, ensuring that they make best use of the available resources before developing new ones. To help meet the supply demand, a pipeline from North of the Anglian Water region to the South is being built. Anglian Water, via the OHID and Anglian Water Liaison meetings, provide updates on the water fluoridation schemes as well as capital projects. In relation to capital projects, this includes the Strategic Pipeline and Anglian Water have confirmed that:

- They will be making changes to the existing fluoride dosing plants to ensure they maintain fluoride dosing to the local areas where an agreement to artificially fluoridate the water already exists, whilst providing un-fluoridated water into the strategic grid.
- The construction and commissioning aims to minimise downtime when transitioning across from the current dosing setups to the new site setups.
- At the end of the programme there will be no change to the fluoridation areas, i.e., all areas currently receiving fluoride will continue to receive fluoridated water.

1.5. Next Steps in Lincolnshire

The Integrated Care Board has recently developed a Lincolnshire Dental Strategy (2023-2026) and 'increasing the focus on prevention' is one of the four themes in the Strategy. The Lincolnshire Oral Health Alliance Group (OHAG), which includes a wide range of organisations with an interest in improving oral health and is Chaired by Public Health, coordinates oral health improvement work across the Lincolnshire system and will lead on the prevention arm of the Lincolnshire Dental Strategy. Fluoridation is included in the OHAG work plan and is also explicitly referenced as an important preventive intervention within the Dental Strategy. Lincolnshire County Council will continue to be part of the OHID and Anglian Water Liaison meetings and members of OHAG will continue to build a case, using local intelligence, to support any decisions by the Secretary of State for Health and Social Care to address the gaps in access to fluoridated water provision in the county.

2. Consultation

Members of OHAG were encouraged to feedback on the DHSC public consultation (in 2022) seeking views on the process for future water fluoridation consultation.

If there is a proposal (by the Secretary of State for Health and Social Care) to make changes to water fluoridation in Lincolnshire, there may need to be a public consultation.

3. Conclusion

Tooth decay is a significant, yet largely preventable, public health problem that can affect people at all stages of life. There is strong scientific evidence that water fluoridation is a safe and effective public health intervention to reduce tooth decay and reduce oral health inequalities. In Lincolnshire, a proportion of the population are supplied with artificially fluoridated water. The water fluoridation provisions of the Health and Care Act 2022 came into force on 1st November 2022 which transferred the power to initiate new water fluoridation schemes or to vary or terminate existing water fluoridation schemes from local authorities to the Secretary of State for Health and Social Care.

Anglian Water are building a strategic pipeline grid. During the construction the aim is to minimise downtime when transitioning across from the current dosing setups to the new site setups. At the end of the programme there will be no change to the fluoridation areas, i.e., all areas currently receiving fluoride will continue to receive fluoridated water.

4. Appendices

These are listed below and attached at the back of the report:

Appendix A	Map of Artificially Fluoridated Areas in Lincolnshire
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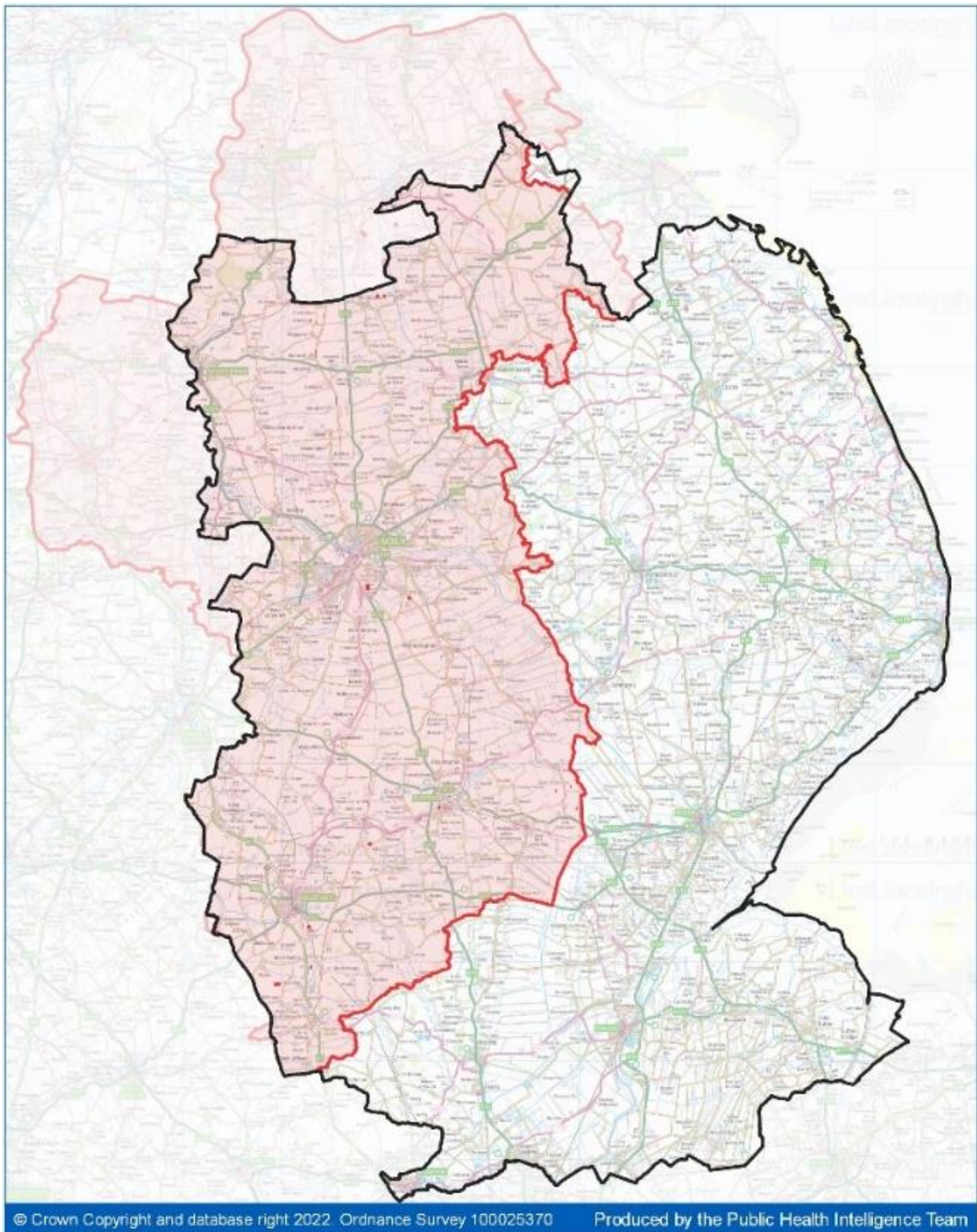
5. Background Papers

The following documents were used to support the information in this report.

Oral health survey of 5 year old children 2022. OHID. March 2023.	Oral health survey of 5 year old children 2022 - GOV.UK (www.gov.uk)
Delivering better oral health: an evidence – based toolkit for prevention. OHID et al. Published June 2014. Updated November 2021.	Delivering better oral health: an evidence-based toolkit for prevention - GOV.UK (www.gov.uk)
Policy paper. Health and Care Bill: water fluoridation. DHSC. Updated 10 th March 2022.	https://www.gov.uk/government/publications/health-and-care-bill-factsheets/health-and-care-bill-water-fluoridation
Water Fluoridation. Health monitoring report for England 2022. March 2022.	Water fluoridation health monitoring report 2022 (publishing.service.gov.uk)
The extent of water fluoridation. The British Fluoridation Society.	Extent of Water Fluoridation - British Fluoridation Society (bfsweb.org)
Explanatory Memorandum to the Water Fluoridation (Consultation) (England) Regulations 2022.	The Water Fluoridation (Consultation) (England) Regulations 2022 (legislation.gov.uk)

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Appendix A: Artificial Water Fluoridation in Lincolnshire



Key

- Fluoridated area
- Non-fluoridated area