New report confirms fluoridation can reduce tooth decay among children

- Benefits are greater for those in more deprived areas, reducing inequalities and helping level up oral health
- Health and Care Bill will cut bureaucracy and make it simpler to expand water fluoridation schemes

Adding fluoride to drinking water can significantly reduce tooth extractions and cavities among children and young people, according to the latest health monitoring report for England.

The findings, from the Office for Health Improvement and Disparities (OHID) and the UK Health Security Agency (UKHSA), show children and young people in areas in England with higher fluoride concentrations were up to 63% less likely to be admitted to hospital for tooth extractions due to decay than those in areas with low fluoride concentrations. The difference was greatest in the most deprived areas as children and young people in these areas benefitted the most from fluoridation.

Fluoride occurs naturally and is present in water and some foods in varying concentrations. In some areas with low natural fluoride levels, fluoride is added to drinking water, in line with safe limits, to improve dental health for children and adults as an effective and safe public health measure.

Secretary of State for Health and Social Care Sajid Javid said:

The evidence is clear: water fluoridation is a safe and effective measure to help improve our nation's oral health.

This report continues to highlight how fluoridation can help reduce cavities and tooth extractions among children, especially those in more deprived communities, helping us level up health across the country.

Through our Health and Care Bill, we will aim to make it simpler to roll out water fluoridation in more areas.

Around 10% of the English population lives in areas with water fluoridation schemes. These schemes cover much of the North East and Midlands and the North West, East of England and Yorkshire and the Humber. The report highlights that:

- In the most deprived 20% of areas, the chance of five-year old children having cavities was 25% lower in areas with a fluoridation scheme than in areas without.
- Five-year-olds in areas with higher fluoride concentrations were less likely to experience dental cavities than in areas with low fluoride

concentrations.

• Up to 56% of hospital admissions for the removal of decayed teeth among children and young people could be prevented in the most deprived areas through water fluoridation schemes.

Director of Public Health Analysis from Office of Health Improvement and Disparities John Newton said:

This report supports the view, as recently underlined by the UK Chief Medical Officers, that water fluoridation is an effective public health intervention for reducing the prevalence of tooth decay and improving dental health equality.

Tony Fletcher, from UK Health Security Agency's Environmental Epidemiology Group, said:

The environmental epidemiology team in UKHSA conducted analyses of data across English districts with varying drinking water fluoride concentrations. The results support previous findings that higher levels of fluoride are associated with improved dental health outcomes.

We found no new evidence to conclude there is a risk of general health harms at the water fluoride concentrations studied, which are all within UK regulatory limits.

There is no convincing scientific evidence that fluoride in drinking water at levels used in fluoridation schemes is harmful, whereas studies show that appropriate levels of fluoride can reduce the prevalence and severity of tooth decay in both adults and children.

Expanding water fluoridation is one aspect of OHID's ambitious agenda to tackle inequalities in health and care and support children's healthy development. A white paper setting out a plan to address health inequalities will be published by the Department for Health and Social Care later this year.

Additional information:

- The Water fluoridation: health monitoring report for England 2022 report is available on gov.uk. The next report will be due by March 2026 at the latest.
- The Health and Care Bill will make it simpler to expand schemes by allowing decisions to be made centrally. Any planned expansion will be subject to the successful passage of the Bill, funding being agreed and public consultation.
- OHID and UKHSA have a duty under the Water Industry Act 1991 to monitor the effects of fluoride on people living in areas covered by water fluoridation schemes on behalf of the Secretary of State. They report on

- this at least every four years.
- The UK Chief Medical Officers recently published a joint technical statement outlining the issue of tooth decay in the UK and the role of water fluoridation in improving the dental health of both adults and children. This statement is publicly available on GOV.UK, accessible here.