What is Fluoridation?

- 1. Fluoridation is the addition of fluoride to water supplies with the intention of adjusting its level in the water to that believed to be optimal for health.
- 2. Fluoride is present in natural water supplies. Supporters of fluoridation argue that by observing differences in health between populations exposed to different natural levels of fluoride it is possible to identify an optimal concentration.
- 3. As fluoride levels rise, the incidence of dental caries declines and so, at higher levels does the incidence of osteoporosis. However the incidence of yellow and brown staining and mottling of teeth rises. Supporters of fluoridation argue that there is a level at which the decline in dental caries is substantial but the increase in yellow and brown staining and mottling is small. They say that that is the optimal level.
- 4. Unfortunately the levels of fluoride necessary to protect against osteoporosis are higher and associate with widespread staining and mottling of teeth. There is therefore no current proposal, or even significant advocacy, of fluoridation to address osteoporosis. The current debate is about fluoridation to address tooth decay.
- 5. Fluoridation has been extensively carried out for over half a century in the United States.

How Safe is Fluoridation?

- 6. Advocates of fluoridation argue that the safety evidence is overwhelming generations of evolutionary experience of the fluoride naturally present in water supplies. Opponents of fluoridation reply that artificial compounds used to modify the level may not behave in the same way. Advocates of fluoridation riposte that half a century of experience of fluoridation in the United States is still a very extended safety trial.
- 7. Opponents of fluoridation bring forward evidence that they say shows fluoridation to be associated with a wide range of health problems. Advocates of fluoridation dismiss this evidence as of very poor quality.
- 8. Some opponents of fluoridation come from a standpoint of libertarian or philosophical resistance to modification of "pure water" and use scientific evidence for support rather than illumination. Others however oppose fluoridation as part of a principled ecological concern about chemical adulteration of the environment and they have deep rooted rational doubts about traditional models of interpretation of evidence.

How Effective is Fluoridation?

9. Tooth decay is much less where fluoridation has taken place.

The Philosophical Debate about Fluoridation

- 10. If every individual could choose the level of fluoride in their drinking water
 - Some would choose low levels to minimise the risk of tooth mottling,
 - Some would choose whatever level was natural in their local supply because they do not trust artificial adjustment
 - Some would choose to accept the levels proposed for fluoridation schemes recognising the optimisation process that produced those levels,
 - Some would choose the higher levels that protect against osteoporosis, accepting tooth staining and mottling as a price worth paying for this protection.
- 11. Individuals can clearly exercise these choices if they buy bottled water but there can only be one composition of the public water supply so only one of these groups can receive their chosen water through the tap.
- 12. Fluoridation supporters argue that the healthy option should be the easy option so it is those who want fluoridated water whose choice should be supplied by the public system. Antifluoridationists contend that the right to drink "natural" water is pre-eminent and it is those who wish to make other choices who should be compelled to make special private arrangements.

The Legal Framework

13. Until recently fluoridation required the consent of both the health authority and the water supplier and there have been no new fluoridation schemes in the UK for many years. The law has now been changed and the Strategic Health Authority may require fluoridation. Before doing so it must carry out a full consultation and take proper account of public opinion.

The Role of PCTs

- 14. PCTs are responsible for assessing the oral health needs of their population and for commissioning services or interventions required to address identified needs. In discharging their duty to improve the oral health of their population and in particular to reduce health inequalities in oral health, PCTs are encouraged by the Chief Dental Officer to consider the option of fluoridating their water supplies.
- 15. In December 2006 all PCTs in the North West agreed to set up a North West PCT's Fluoridation Evaluation Group.
- 16. That group has now completed its task and reported. The report provides the following information
 - An overview of the latest (February 2008) DH/Chief Dental Officer Guidance
 - An understanding of the population's dental health in the North West
 - A summary of the literature surrounding evidence of effectiveness of fluoridation
 - An overview of the available evidence on the safety of fluoridation.
 - An overview of the ethical issues of fluoridation
 - A review of public opinion of fluoridation.

- An assessment of the technical feasibility of fluoridation in the North West through consideration of four possible fluoridation schemes
- An indication of costs for possible fluoridation schemes
- Identification of next steps.
- 17. Now that this information is available it will be appropriate for PCT Boards to consider whether they wish to request the Strategic Health Authority to explore the possibility of fluoridation of the public water supply.
- 18. Before taking this step PCTs should consult with local stakeholders. It is some considerable time since Stockport MBC discussed fluoridation or indeed there was a discussion in the Stockport economy about fluoridation issues. Although its decision on that occasion was supportive of fluoridation it is likely that the Council will wish to rediscuss it given the passage of time.
- 19. It is suggested that we consult with Stockport stakeholders (including Stockport MBC and OSC) between now and September and that we consider at the September Board meeting whether to ask the Strategic Health Authority to explore the possibility of fluoridation of the public water supply. This 'discussion' is not a formal consultation process which may come later in any process.
- 20. The ultimate decision, if such a request is made, will lie with the Strategic Health Authority and will be influenced by the public consultation that they must undertake.
- 21. It is not appropriate at this stage for the PCT to form a corporate view on the issue of fluoridation and Board is asked to defer any decision about whether it does or not support the merits of fluoridation (as opposed to the process) until the appropriate time.

RECOMMENDATION

- 1. PCT Board is asked to agree to consider the report of the North West PCTs' Fluoridation Evaluation Group at its September meeting
- 2. PCT Board is asked to agree that on that occasion it will discuss whether to ask the Strategic Health Authority to explore the possibility of fluoridation of the public water supply
- 3. PCT Board is asked to agree that between now and September we should ascertain the views of major local stakeholders
- 4. PCT Board is asked in particular to ascertain the views of Stockport MRC
- 5. PCT Board is asked not to express a formal view on the merits of fluoridation at this stage

STEPHEN J. WATKINS
Director of Public Health.