yields better results than blanket countrywide immunization of all women of childbearing age, whatever the risk of contracting the disease.
The progress achieved is promising but there is still much to be done. Reliable supplies of potent vaccine, sterile syringes and needles are needed to enable affected countries to conduct regional immunization days backed up by health education campaigns. These needs are vital. Without their provision, not only will the 1995 target of neonatal tetanus elimination be missed, but the potential of safer childbirth and the possible 25% cut in infant mortality will also be unnecessarily delayed.
"Tetanus is but one among many problems associated with childbirth which threaten the lives of mothers and their newborns", says Dr Henderson. "Eliminating this one problem will not solve them all. But tetanus is a warning beacon. Wherever it occurs, it demonstrates abject failure of the health system. So eliminating this disease automatically requires health workers to recognize and respond to the problems which have generated it, ensuring that all mothers have access to the basics of good maternal care. Tetanus elimination does indeed provide a powerful strategy for improving maternal care more generally."

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WHO advocates affordable fluoride toothpastes for the developing countries

Fluoride toothpaste is now the most widely used method of prevention in the world, but its cost remains a deterrent for many of the world's poorer populations. This was the conclusion reached by a WHO Expert Committee meeting a few months before this year's World Health Day, on 7 April, which focused on oral health. Among measures to promote greater access to these toothpastes, the Committee proposed exemption from duties and taxation, since fluorides are added for the sake of public health and not for cosmetic purposes.
According to data presented at a recent meeting in Geneva, more than 800 million people throughout the world now benefit from fluorides, the most common naturally occurring fluorine chemical compounds, as a means of controlling caries and maintaining oral health. This is mostly achieved through the fluoridation of water for (210 million people), salt (50 million) or toothpaste (450 million). Ground water in its natural condition almost always contains fluorides, but in concentrations that vary widely from one place to another.
Fluoride has been known for several decades to be effective against dental caries, and it acts in several different ways. When present in dental plaque and saliva, it hastens the remineralization of incipient enamel lesions before cavities can become established. It also interferes with glycolysis, the process by which bacteria metabolize sugars to produce acid. In higher concentrations, it has a bactericidal effect and when ingested during the period of tooth development, fluoride is thought to make the enamel more resistant to later acid attacks.
The other side of the story is that high concentrations of fluoride may give rise to fluorosis, with the appearance of white patches and lines on the teeth. Mild fluorosis cannot be detected by the untrained eye, but may present unaesthetic forms when it is more severe. The ideal balance must thus be found to ensure the benefit of effective fluoride protection against caries while avoiding the damaging forms of fluorosis, which the WHO experts nevertheless regard as acceptable in a mild form.
From the public health standpoint, they advocate as a general rule a strategy of low but regular exposure to fluorides, while the application of higher concentrations, expecially gels, should be

reserved for patients particularly vulnerable to caries.

This goal is described in the report adopted in Geneva as "maintaining a constant, low-level of fluoride in as many mouths as possible", and when it is attained by adding fluoride to water, salt or toothpaste, the change in incidence of dental caries in the population in question soon becomes evident. Many scientific studies show that when significant population exposure to fluoride begins in any community where previously there was little or none, a decline in the incidence of dental caries in children will become evident within about two years. Incidence among adults will also be reduced, although the decline will be less evident.

For programmes of prevention to be effective, all sources of fluoride absorbed by individuals in their environment must be taken into account, so that total intake does not exceed the optimal dose for oral health and health in general. The experts convened by WHO have stressed that in communities where water fluoridation is not possible, for technical or financial reasons, fluoridation of salt may be regarded as a suitable alternative. Switzerland is a good example of a country where this method has resulted in a large reduction in dental caries in children and young people. Another alternative is fluoridation of milk, a process which has shown promising results in certain community projects undertaken by WHO.

However, it is the use of fluoride toothpastes that has been subjected to the most rigorous clinical testing. More than 100 trials have shown that brushing the teeth with a fluoride toothpaste will reduce the incidence of dental caries by about 25% in only 2–3 years and more than twice that figure if used consistently from infancy. In view of the fact that cost remains a barrier for its widespread use in many developing cuntries, the experts called for efforts to make fluoride toothpastes, that are effective in preventing dental caries, affordable for use by underprivileged populations.

They also recommended that water fluoridation should be introduced and maintained whenever possible, since this is a safe and cost-effective process. They recommended a range of fluoride concentration for water of 0.5 to 1 mg per litre. Fluoridated salt should contain a minimum concentration of 200 mg per kilo.

This clear stand by the WHO Expert group in favour of fluoridation for the prevention of dental caries comes as a curtain raiser to 1994, which Dr Hiroshi Nakajima, the Director-General of WHO, has decided to devote to the theme of oral health. Not only on 7 April, but throughout the year, the Member States of the Organization, the medical profession and the public will be mobilized to give greater attention to this important aspect of public health.

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