## Global cooperation pledged Novel Japanese after first AIDS summit

- One million cases by 1991 predicted
- Unanimous support for WHO programme

THE spirit of unity and consensus achieved at the first AIDS (acquired immune deficiency syndrome) summit of health ministers held in London last week was undeniable. Agreement was unanimous on the need for a global programme of health education, backed by sufficient resources, to stem the transmission of the human immunodeficiency virus (HIV). The 15-clause declaration that officially concluded the three-day meeting, attended by delegates from 149 countries, including 114 health ministers, pledged absolute commitment to the global AIDS strategy of the World Health Organisation (WHO), co-sponsor, with the British government, of the summit. How the meeting's laudable conclusions will be translated into political reality within individual countries is less certain.

The summit clearly achieved its stated objective to provide health ministers and senior policy-makers with a forum for discussing strategies for AIDS prevention and control with particular emphasis on information and education. The international publicity surrounding the summit will also have been welcomed.

Dr Jonathan Mann, director of WHO's AIDS programme, told the summit that between 5 and 10 million people are believed to be infected with HIV, with 75,000 fully developed cases of AIDS having been reported so far, although the true figure is likely to be nearer to 150,000. By 1991 it will rise to 1 million, said Mann.

Different modes of HIV transmission in different populations pose problems for global strategy. In Western Europe, North America and Australia, the virus

### Messel pit saved

A LAST-MINUTE decision by the West German Land of Hesse has prevented the fossil-rich Messel pit from being filled with rubbish. Preparations were nearly complete to turn the pit, located near Darmstadt, into a dump, despite objections from palaeontologists and environmentalists. The Messel pit is one of the richest known sources of Eocene fossils in the world.

The government of Hesse announced in mid-January its intention to seek another site for the dump, perhaps in a nearby forest. The decision must still be approved by local authorities. Steven Dickman spreads mainly among homosexual and bisexual men and through intravenous drug abuse. In Africa and parts of the Caribbean, transmission is mainly through heterosexual contact.

The summit failed to make a recommendation on mandatory testing of individuals in high-risk groups. Attitudes towards compulsory testing vary greatly. According to Bulgaria's Professor Lyubomir Shindarov, HIV testing is compulsory for high-risk groups "such as blood donors, spermal and mother's milk donors, Bulgarian nationals coming back home after a long stay abroad, foreign students and workers who are going to spend more than a month in the country, pregnant women and newly married couples". Bulgaria has reported three cases of AIDS. The prevalence of the disease remains low in most communist countries. Dr Eugene Chazov, Soviet Minister of Health, told the summit that only one Soviet citizen is known to have been an AIDS victim, and only 33 cases of HIV infection have been reported. Of these, 18 had sexual contact with foreigners "who were probable sources of infection". Examination of 7.325 homosexuals and bisexuals and 43,486 individuals with multiple sexual contacts had not revealed a single seropositive case, Chazov said.

Professor She-Sheng Wang, of China, said that up to the end of last year, three cases of AIDS had been reported in China. Of those, two were foreign tourists and the third a former resident of Hong Kong who had lived in the United States.

Since 1985, a target population of 10,000 had been screened, revealing four seropositive haemophiliacs who had used imported factor VIII and seven seropositive foreigners. China, said Wang, would concentrate on preventing the import of AIDS. "Chinese law and traditional moral values prohibit homosexuality, sexual promiscuity and the abuse of drugs."

As of 12 January 1988, the Americas accounted for some 57,000 reported cases of AIDS (with 49,000 in the United States), Africa 8,693, Europe 8,775, Asia 224 and Oceania 742.

Undoubtedly the most important aspect of the summit was the exchange of information and ideas on different countries' handling of AIDS. Furthermore, the meeting demonstrated a greater willingness for many countries to concede that AIDS is a truly global issue, and that the threat it poses is real. Simon Hadlington

# superconductor

A GROUP of Japanese scientists at the Science and Technology Agency's National Research Institute for Metals in Tsukuba has reported a new high-temperature superconductor composed of bismuthstrontium-calcium-copper oxide. development is unusual in that the new oxide does not contain any rare earth elements.

The new oxide, BiSrCaCu,O,, when annealed for several hours at just under 900°C, shows an onset in reduction of resistance at 120 K and zero resistance at 75 K. But there is a very sharp drop to almost zero resistance between 107 and 105 K. And Dr Hiroshi Maeda of the institute, whose group made the oxide, suspects that the new ceramic is composed of two phases, one with a critical temperature of 75 K and the other about 105 K.

Magnetic susceptibility measurements show clear evidence of the Meissner effect. And the oxide can be made to float in air when placed above a permanent magnet after soaking in liquid nitrogen. The oxide is black in colour but its crystal structure has not yet been determined.

All high  $T_c$  superconductors found so far contain rare earth elements, such as vttrium and lanthanum. In fact, Japan's Ministry of International Trade and Industry has been allotted ¥140 million (about \$1 million) in its fiscal 1988 budget to assess world supplies of rare earth elements because there were fears that Japan's supplies of the elements might dry up when the new superconductors reach the applications stage. Some theorists suggest, however, that it is the presence of Cu-O planes or chains within the atomic lattice that is crucial for superconductivity.

The results of the present discovery will be published in the Japanese Journal of Applied Physics. **David Swinbanks** 

### Shuttle launch date

THE National Aeronautics and Space Administration (NASA) has set 4 August as its target date for the resumption of space shuttle flights. The date may slip as the booster test programme continues, but NASA officials are promising a launch sometime in August unless new problems arise. The announcement was made by Admiral Richard H. Truly, NASA's associate administrator for space flight, before a congressional subcommittee on space science and applications. He said that some minor manufacturing flaws had been found after last December's booster test, but he insisted none was serious enough to threaten the launch date. David Lindley