

HIV and Africa's Future

When thousands of delegates descend on Durban, South Africa, for the XIII International AIDS conference from 9 to 14 July, it will be the first time this high-profile meeting has convened in a developing country. The venue should bring much-needed attention to a crisis that is slowly engulfing sub-Saharan Africa. HIV infection rates have climbed to staggering levels in this region: More than 7% of the adults in 21 countries were estimated to be infected by 1998, and in

South Africa, the prevalence among pregnant women—a population widely used to track the disease—zoomed from less than 1% to more than 20% in the 1990s. These grim figures portend a harsh future of escalating disease and premature death in countries whose health care systems are already overburdened.

Two decades after AIDS was first recognized as a new disease, researchers are stepping up their efforts to understand and deal with this looming tragedy. In the following pages, *Science* correspondent Jon Cohen provides a vivid firsthand look at those efforts and the researchers themselves who are struggling—often under difficult conditions—to come to grips with the disease. Many studies are probing the significance of different disease patterns, transmission rates, and HIV subtypes in Africa (p. 2153). Pioneering trials have found relatively cheap ways of reducing mother-to-child transmission of HIV, but applying those results is proving difficult (p. 2160). Several vaccine tests are being planned, but all are at the earliest stages, which means it will take years before a preparation might prove its worth (p. 2165; also see Editorial, p. 2129). In South Africa, researchers have documented the alarming spread of HIV by migrant laborers and sharp increases in infection rates, but the government's confused response to this growing crisis is drawing sharp criticism from the scientific community (p. 2168).

Most African countries can't afford to support much research themselves, so the vast majority of these studies are being conducted in collaboration with scientists from the developed world. These partnerships have brought major benefits, but inherent inequalities can cause tensions and require constant give-and-take from both sides (p. 2155). On page 2156, we list the major collaborative research projects throughout the continent. This

is the first time such a list has been put together; we realize it is not comprehensive and intend to update it periodically on *Science's* Web site (www.sciencemag.org/feature/data/africacollaborations.shl). Please send additions and changes to science_news@aaas.org.

Research, of course, is not enough. Supervisory Senior Editor Barbara Jasny asked three leading AIDS experts to discuss the enormous policy challenges ahead. Peter Piot, head of the Joint United Nations Programme on HIV/AIDS, argues that more political leadership at the highest levels is needed (p. 2176). Hans Binswanger of the World Bank outlines strategies for scaling up prevention programs from local to national levels (p. 2173), and David Bloom of Harvard School of Public Health argues for a Global Task Force to help provide more equitable access to AIDS treatments (p. 2171). Next month's meeting should help focus the world's attention on these urgent issues.

—COLIN NORMAN



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