INTRODUCTION

HIV/AIDS In America

The epidemic of Acquired Immunodeficiency Syndrome was first recognized in the United States. As clinicians from Los Angeles, California, reported in the 5 June 1981 issue of Morbidity and Mortality Weekly Report, they had seen odd immune problems and opportunistic infections in five young “active homosexuals.” Similar reports soon came in from all over the country and the world, making it clear that AIDS affected heterosexuals and homosexuals alike and also spread from mother to child and via tainted blood products and dirty needles. In the following years, U.S. researchers helped prove that HIV causes the disease, which led to a critical blood test to detect the novel retrovirus. The U.S. National Institutes of Health and the Centers for Disease Control and Prevention—prodded by AIDS activists such as Mark Harrington of the Treatment Action Group (pictured here)—steadily ramped up support for basic research as well as efforts to develop and test treatment and prevention interventions. In the early 2000s, the U.S. government poured billions of dollars into programs that now bring life-saving antiretrovirals to millions of people in cash-strapped countries.

By any measure, the United States has played a vital global role in unraveling HIV’s mysteries, providing help to the infected and protecting the vulnerable. It may seem odd, then, that since 1990 this country has not hosted the International AIDS Conference, a megameting that has gathered 20,000 participants every other year. But that will change on 22 to 27 July, when the gathering will take place in Washington, D.C. The meeting organizers shunned the United States because of an immigration ban on HIV-infected people imposed by Congress in 1987, which President Barack Obama ended in 2010.

In keeping with that shift, Science is focusing this special HIV/AIDS issue on America, now home to an estimated 1.2 million HIV-infected people—many of whom have little in common with the original five gay men in Los Angeles. The Deep South has become the epicenter; blacks—gay and straight—face a far higher risk of becoming infected than whites, and poverty is a major driver for all races. The biggest challenge the country faces today is diagnosing all of its HIV-infected people and helping them take full advantage of the existing treatments, which both stave off disease and make people less infectious. It is a problem shared worldwide.

Correspondent Jon Cohen, working with photographers Malcolm Linton and Darrow Montgomery, visited 10 U.S. cities this spring, and the package of stories that begins on p. 168 describes the varied epidemics and responses. A News Focus by Cohen spends a day with Anthony Fauci, who leads the NIH branch that funds more HIV/AIDS researchers than any institution in the world (p. 152). This special issue also includes an Editorial by Salim Abdool Karim (p. 133), who highlights problems rolling out what’s known as pre-exposure prophylaxis, as well as an update on HIV antibody research by Dennis Burton and colleagues (p. 183) that promises to inform AIDS vaccine development. Online, a slide-show offers more images and stories about the country’s epidemic, and Science Careers features profiles of two young HIV/AIDS public health workers making a big dent in big-city epidemics.

— LESLIE ROBERTS

A Tale of 10 Cities

CONTENTS

News

168 The Many States of HIV in America
172 Birmingham, Alabama: A Southern HIV/AIDS Program With All the Fixins
173 Jackson, Mississippi: By the People, For the People
174 Atlanta, Georgia: And the Band Played On, Vol. 2
175 San Francisco, California: A Concerted Effort to Lighten the Load
176 Los Angeles, California: Life in the Fast Lane: HIV and Meth
177 San Diego, California, and Tijuana, Mexico: My Virus Is Your Virus
178 New York, New York: Miracle on 34th Street: Success With Injectors
Pay Now, Benefits May Follow
180 Providence, Rhode Island: HIV and the Cell: The Prisoner’s Dilemma
181 Baltimore, Maryland: Dancing the Night Away; Keeping HIV at Bay

Review

183 Broadly Neutralizing Antibodies Present New Prospects to Counter Highly Antigenically Diverse Viruses
D. R. Burton et al.

See also Editorial p. 133; News Focus story p. 152; Science Express Policy Forum by S. Lynch et al.; Science Careers;
HIV/AIDS in America
Leslie Roberts

Science 337 (6091), 167.
DOI: 10.1126/science.337.6091.167