

In this month's *Bulletin*

An outbreak centre for Europe?

Anthrax, mad cow, foot-and-mouth — the names alone elicit fear. If you live in the USA, you might be comforted by the thought that over a thousand keen-eyed experts at the Centers for Disease Control and Prevention (CDC) in Atlanta are watching out for and primed to take fast action against outbreaks of these and other unpleasant infections (although the US response to the recent anthrax scare was criticized for being inadequate). Europeans, Tibayrenc notes in an editorial (p. 1094), lack such an entity, and the “cacophony” of the European response to these biological scares underscores the need for one. A start has been made: a group of about 40 interested scientists are talking about creating a “European Centre for Infectious Diseases” (ECID) with outbreak surveillance and response capability. With bioterror on everyone’s mind, now, says the editorialist, is a good time to bring a European coordinating centre into operational existence.

Bias hampers availability of medicines

The HIV/AIDS pandemic, which is the main theme of this month’s issue, has highlighted the need for ensuring the widest possible access of medicines — whether antiretroviral drugs in the South or anti-anthrax antibiotics in the North — to the people who need them, wherever they live and whatever their financial resources. An essential step, however, in the long research and development process all promising compounds undergo before being released for wide use, is publication in the peer-review literature of reports on clinical trials of these compounds. And that step has become clouded by an issue that has only recently emerged into public debate: bias from meddling by drug manufacturers in the publication process. In an editorial, Quick (p. 1093) cites evidence that the drug trials financially supported by pharmaceutical firms are more likely to produce favourable results than totally independent trials and that these firms exert a growing influence on how trials are conducted and on how,

when and even whether the results are published. Attempts to counter this trend are under way: the editors of 13 leading medical journals recently published a joint editorial denouncing the practice, and WHO is bolstering a “firewall between commercial interests and normative, regulatory and research decisions”. Quick calls for a Helsinki-type declaration on the rights and obligations of clinical investigators in managing clinical trials.

Reversing AIDS

The HIV/AIDS pandemic is not all doom and despondency. There are bright spots, successful attempts to stem the advance of the infection. Piot et al. (pp. 1106–1112) point to national or local successes in countries as different as India, the Russian Federation, Senegal, Thailand, the United Republic of Tanzania, and Zambia. Common to them all has been a highly focused set of actions within a broad society-wide context or, conversely, as the authors put it, “broad social mobilization accompanied by clear deliverables”. A successful national response to the challenge of HIV/AIDS will, the authors write, most likely comply with a few basic principles, such as being firmly rooted within the community, enjoying political leadership and national coordination at the highest level, harnessing the commitment of many if not all sectors of society, and involving people living with HIV. In addition, achieving synergy between prevention and treatment, and combating stigma can tip the scales in favour of success. And globally, with this year marking an unprecedented “convergence of political, scientific and economic forces”, the time is ripe for action to prevent a “global catastrophe”.

Waiting for an AIDS vaccine

Since 1987, when the first HIV vaccine was tested in human volunteers, more than 30 candidate vaccines have been evaluated in over 60 early (phase I/II) human trials, mostly conducted in the USA and Europe and involving about 10 000 volunteers. Two vaccines have emerged from the pack. One is in late-stage (phase III) trials involving several thousand volunteers in North America, Europe and Thailand. A

second will enter a phase III trial to be conducted in several countries on the American continent. In reviewing the prospects of eventually seeing an effective vaccine appear on the scene, Esparza (pp. 1133–1137) describes three stumbling blocks. One is a lack of information about how to measure protective immunity against HIV/AIDS: a commonly used indicator with many infections is the level of antibodies in the blood, which in HIV/AIDS may not be an indication of protective immunity. Another problem is the variability of HIV strains predominant in different parts of the world: will a vaccine against one be effective against another? A third difficulty is the lack of a good animal model in which to test a vaccine designed for human use. A usable vaccine could, the author believes, become available within the next six years. Even a vaccine that protects only 50% of recipients would be useful in populations with a high incidence of HIV infection, especially if the vaccine is used in conjunction with other preventive interventions.

Preventing AIDS rationally

A number of public health interventions have been shown, in randomized controlled trials, to be effective in stemming the spread of HIV/AIDS in poor countries. Some of these interventions target risky sexual behaviour and/or at-risk population groups, and employ one or more of a variety of strategies, among them education, treatment of sexually transmitted infections, antiretroviral therapy to prevent mother-to-child transmission of HIV, use of breast-milk substitutes, promotion of condom use, and so on. In choosing a target population and a strategy, Grassly et al. note (pp. 1121–1132), health policy-makers should take into account the epidemiological and socioeconomic settings in which the intervention will be carried out. For each type of intervention the authors offer a series of indicators — for example, the phase of the HIV epidemic, the degree to which the target population is mixed with other at-risk population groups, the proportion of women who breastfeed, and so on — that could help policy-makers choose the intervention most likely to work in a particular setting. ■