threatening infections. We believe that governments worldwide should impose restraints like those in force in the European Union, which have not reduced food production.

Conservation through prescription tailored to diagnosis. Ideally, technological advances in point-of-care diagnostics would enable prescribers to avoid dispensing antibiotics for viral infections and fevers of unknown origin. Better diagnostics could allow prescriptions to be tailored narrowly to a pathogen's susceptibilities. Adoption of such technology would require physician education, suitable reimbursement, and documentation of outcomes.

An audio interview with Dr. Cars is available at NEJM.org

Conservation through controlled access. In wealthier countries, all health care facilities should institute antibiotic-stewardship programs. In poorer countries, despite the need to expand access to effective antibiotics, there's also an urgent need to reduce inappropriate use fostered by misaligned financial incentives for providers and by over-the-counter access. Given the ease with which antibiotic resistance spreads, we all share an interest in helping poorer countries build sufficient infrastructure to allow medical personnel to distinguish among pathogens before antibiotics are prescribed.

These issues concern everyone. Military leaders don't want their personnel devastated by infections associated with wounds or close quarters. Drug-company leaders realize that the public expects their firms to produce life-saving medicines and blames them when they don't — an attitude shared in countries whose developing economies offer companies their best prospects for growth. But physicians may care about this problem most passionately, for they must tell more and more families that there is no hope. Doctors can act not just individually and medically, but also collectively and civically, to persuade elected officials to respond to expert panels' recommendations and national leaders' directives with the legislation, appropriation, regulation, enforcement, and cooperation needed to ensure access to these life-saving drugs.

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HISTORY OF MEDICINE

Ebola in a Stew of Fear

Gregg Mitman, Ph.D.

"Bush meat?" I asked. The food in front of me smelled delicious, but the mention of bush meat in the stew evoked a twinge of fear. Could it be fruit bat? Chimpanzee? Both can harbor Ebola virus.

Our four-member team had just filmed a documentary in a remote rural village near the Guinea border. Shaded by the thatched roof of an open-air rice kitchen, we were sitting down to share a communal meal. Awaiting us was a tempting Liberian stew of cassava, pepper — and bush meat.

My hosts smiled. Even here, an hour's trek from the nearest road, and a 2-day drive from the capital city of Monrovia, news of the Ebola outbreak hung in the air. "Don't worry," they assured me. No fruit bat. No chimpanzee. I hesitated a moment longer, but I didn't want to seem mistrustful. So I dipped my spoon into the pot and savored the spicy flavors.

The journey to Liberia in June had been uncertain. The international media had been mostly quiet about the slow burn of the Ebola outbreak in Liberia and neighboring Guinea and Sierra Leone in early March, when I began planning the trip. But I soon started following reports of Ebola cases through personal contacts and Liberian news sources. In late

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May, as I was preparing to leave, information in the Western press and on government websites was still spotty.

In late July, when word came that two American health care workers in Liberia had become infected, the outbreak suddenly drew global headlines labeling it an "epidemic." Ignited by media attention, fear erupted and spread faster than the virus itself. Quarantine is now the watchword. Fear of Ebola escaping the African continent has finally brought international attention.

Some aspects of Ebola's ecology are known. Bats appear to be reservoirs for the virus, although other animals are susceptible and can pass the infection to humans.

But the fear surrounding the virus has its own ecology that needs to be understood as well. What writer Mike Davis calls "the ecology of fear" is different in the country than in the city. It varies with cultural traditions and religious beliefs. Rich people experience it differently from poor people. And it changes over time. Western attitudes associating equatorial Africa with deadly diseases such as malaria, yellow fever, and Ebola abound. And the fear displayed toward doctors and nurses in affected areas is more than the product of ignorance and superstition. Such fears also reflect the scars and painful memories of past medical encounters in West Africa.

This is not the first time a disease outbreak has made West Africa the subject of global attention and concern. Over the course of 1928 and 1929, for instance, a flare-up of yellow fever in West Africa resulted in the deaths of prominent American, British, and Japanese medical researchers and educational advisers. It prompted the U.S. government and the League of Nations to put intense political pressure on the Liberian government to address the "unsanitary conditions" deemed a "menace" to "the lives of . . . the citizens and subjects of foreign nations who reside in Liberia."[1]

Fears of West Africa as the white man's grave, a view dating back to the 18th century, persisted in early 20th-century accounts of the yellow fever scourge. These fears survive to this day. They lay behind my nervous question on the Guinea border. They appear, more blatantly, in Donald Trump's much-publicized tweet: "stop all flights from EBOLA infected countries or the plague will . . . spread inside our 'borders.'"

But the ecology of fear has other historical expressions. The yellow fever outbreak signified a major threat to American business in Liberia. In 1926, Firestone Tire and Rubber Company gained access to 1 million acres of land to supply the United States with rubber free from British control. Knowledge of tropical medicine was vital to the company's success.

It was, in fact, a 1926 Harvard medical expedition to Liberia, undertaken on behalf of Firestone, that had brought my film team to the Liberia–Guinea border in 2014. We hoped to learn more about the history and memory of local encounters with the expedition. In 1926, the eight-member team had traveled for 4 months through the Liberian interior, collecting blood, tumors, urine, and photographs of diverse ethnic groups. Some people ran away when they saw these strangers. The routes the expedition traveled were those used by European and West African slave traders, white missionaries, and Liberian soldiers recently sent to conquer the interior. Why stick around when strangers had been such potent contributors to the local ecology of fear?

Other Liberians resisted the expedition's efforts to extract their tumors, blood, and parasites. When a town chief refused to give up his "charming little tumor," wrote an expedition member, "we cajoled, we threatened, we vowed he would die . . . and still he coyly refused to part with that most . . . cherished treasure."[2] The chief had grounds for suspicion: the taking of bodily things, and the administering of experimental drugs, probably seemed all too close to the witchcraft he had good reason to fear.

American medical research profited from the blood, parasites, and viruses collected on these expeditions. Such materials were the stuff of Nobel Prizes, professional prestige and fame, and medical breakthroughs that benefited people throughout the world. The 1951 Nobel Prize awarded to Max Theiler, a member of the 1926 Harvard expedition, for his work on a yellow fever vaccine, is one example. But biomedical research did little in return to help build medical knowledge and public health capacity within Liberia. When Liberian friends now post on Facebook links connecting the Ebola outbreak to past American biomedical research, they point to the history and memory of exploitation and extraction that run deep in West Africa. These roots of medical extraction in Africa contribute to the ecology of fear.

A decade of peace has passed in Liberia, following 14 years of a civil war that racked the nation between 1989 and 2003. The country's infrastructure is slowly be-

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ing rebuilt. A new wave of land concessions have been granted to multinational corporations seeking to extract Liberia's mineral and agricultural wealth. Yet investment in the country's medical infrastructure languishes. Liberia has fewer than 200 doctors for a population of 4 million. It is poorly equipped to deal with the current public health crisis. Remembering this history can help us understand why the current Ebola epidemic — and the ecology of fear associated with it — is unfolding as it is.

My dinner hosts on the Liberia–Guinea border knew of Ebola and its risks long before the disease made Western headlines. They were not ignorant. Their fears, like my own, were grounded in past experiences and present circumstances.

But we shared more than fear. We also shared a common history, one that has bound the United States and Liberia since free blacks from America first settled on West African shores in the 1820s.

And the laughter we shared that day, when a fearful white American asked the question, "Bush meat?" spoke to a recognition not of difference but of a shared humanity.

In this moment of crisis, fears arising from difference and ignorance of the historical and cultural contexts that underlie mistrust create a toxic ecology in which the Ebola virus thrives and spreads.

As of mid-September, total international pledges for Ebola aid amount to approximately $338 million.[3] Personnel from the U.S. Centers for Disease Control and Prevention are now on the ground in Liberia. But international aid workers will need to engage many people in local communities to win this fight against Ebola. Unless aid workers and the media understand local fears, we may fail to stem the crisis, which is devastating the economy, health, and well-being of a nation with deep historical ties to the United States.

Modern medicine owes a debt to West Africans for past sacrifices made in the advancement of global health. This week's announcement by President Barack Obama of a U.S. commitment to build 17 Ebola treatment centers in Liberia, train medical workers, provide testing kits, and offer logistic support is a welcome and needed response. It should be the start of a long-term, concerted effort to strengthen the public health infrastructure, which is critical to the region's future stability.

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Korea's Thyroid-Cancer "Epidemic" — Screening and Overdiagnosis

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The Republic of Korea has provided national health insurance to its 50 million citizens since the 1980s. Although health care expenditures in South Korea's single-payer system are relatively low — accounting for 7.6% of the country's gross domestic product — the system is technologically intensive; among the countries in the Organization for Economic Cooperation and Development, it ranks second in acute care beds per million population, fifth in computed tomography (CT) scanners per million population, and fourth in magnetic resonance imaging (MRI) machines per million population. The country also has a well-developed data infrastructure for both vital statistics (Statistics Korea) and cancer incidence (Korean Central Cancer Registry).

In 1999, the government initiated a national screening program for cancer and other common diseases. This program now provides screening for breast, cervical, colon, gastric, and hepatic

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