

Congress Mobilizes Against Hantavirus

After getting big-time press exposure this spring, the mysterious "Four Corners Disease"—a lethal respiratory disease centered at the junction of four southwestern U.S. states*—has now attracted some big-time funding. Earlier this month, Congress earmarked \$6 million in emergency aid to combat the disease, including \$2.6 million for the Centers for Disease Control and Prevention (CDC).

The Four Corners disease has been blamed for the deaths of 22 people, many of them Navajos, so far this year. CDC officials have fingered a rodent-borne hantavirus, apparently transmitted by inhalation, as the cause of the respiratory symptoms similar to those of hemorrhagic fever.

Much of the \$6 million will go to state and Indian tribal agencies to educate citizens and health workers about the risks of infection. In addition, says James Hughes, director of CDC's National Center for Infectious Diseases, the CDC plans to spend an undetermined sum on isolating the virus, identifying risk factors through epidemiologic research, and developing a diagnostic test.

While Congress seems to have tapped CDC to be the lead agency for this research, old hands in the hantavirus field note that much of CDC's expertise comes

*Arizona, Colorado, New Mexico, and Utah.

Disease	# cases 1993	rate 1993* [@]	rate 1992* [#]	% change 92-93	U.S. rate 1991* [†]
Measles	44,528	30.0	7.9	282	3.8
Diphtheria	2827	1.9	0.7	163	<0.1
Syphilis	14,051	9.5	4.1	136	17.3
Typhoid	288	0.2	0.1	82	0.2
Gonorrhea	114,859	77.4	48.8	60	249.5
Malaria	43	<0.1	<0.1	34	0.4
Influenza	5,415,554	3651.1	2888.2	28	10,000 [†]
Tuberculosis	20,114	13.6	11.1	24	10.4
Whooping cough	8786	5.9	5.2	16	1.1

SOURCES: RUSSIAN STATE COMMITTEE ON SANITARY AND EPIDEMIOLOGIC SURVEILLANCE; RUSSIAN REPUBLIC INFORMATION AND ANALYTIC CENTER; CENTERS FOR DISEASE CONTROL AND PREVENTION.
* per 100,000 people; [@] through May, 1993; [#] through May, 1992; [†] estimated

Red scare. Russia is experiencing a surge of infectious diseases, according to statistics compiled by the Russian State Committee on Sanitary and Epidemiologic Surveillance (*Goskomsanepidnadzor*). Much of the resurgence can be attributed to Russia's deepening poverty and increasingly poor nutrition, committee chairman Evgenii Beliaev told *Science*. In addition, Beliaev blames the disease comebacks on "an intense refusal by the population to be vaccinated." This attitude, he claims, is being fueled by "sensational" Russian newspaper accounts of ineffective vaccines, a charge Beliaev denies. Nevertheless, Beliaev's committee—equivalent to the U.S. Centers for Disease Control and Prevention (CDC) and parts of the Food and Drug Administration (FDA) and Environmental Protection Agency—is teaming up with the FDA to improve vaccine quality (*Science*, 9 July, p. 151). In addition, in April the committee printed its first issue (devoted to diphtheria) of *Health of the Population and the Environment*, which is modeled after the CDC's *Morbidity and Mortality Weekly Report*. Kirgizia and Uzbekistan have launched similar journals.

from the Army. Until just over a year ago, four of CDC's top researchers in this once-obscure area worked for the U.S. Army's Research Institute of Infectious Diseases. And even though Congress excluded the Army from its appropriation, the Army possesses the only permit granted

thus far to conduct a clinical trial of a vaccine to combat a hantavirus, the puumala virus. This strain, which sends 1000 Scandinavians to the hospital each year, says Army scientist Connie Schmaljohn, may turn out to be the closest known relative of the Four Corners virus.

FAO Geneticist Caught In Election Turmoil

Say you're a popular scientist intent on heading up the United Nations' Food and Agricultural Organization (FAO). You announce your candidacy and distribute ideas for the agency's future. Then strange things start to happen: Your work contract isn't renewed, and your prize scientific program gets mired in red tape. Is someone out to get you?

That's what some observers are charging in the case of Patrick Cunningham, an Irish geneticist who heads FAO's animal production and health division. Cunningham launched his bid to become FAO director-general in April by calling for an overhaul of FAO's management, which oversees an \$800 million annual budget. Cunningham, who led FAO's successful drive to eradicate the cattle-killing screwworm fly (*Science*, 18 October 1991, p. 371), hopes to succeed Lebanese agronomist Eduoard Saouma. After 18 years at the helm, Saouma plans to step down at the end of this year; in November, the FAO's governing conference will choose a new director-general from among nine candidates, including Cunningham.

But Cunningham has had a rough time since announcing his candidacy. His 3-year contract, which expires next month, hasn't been renewed. And the brakes seem to have been applied to a major program in Cunningham's division—a 5-year, \$15 million effort, just begun, to preserve genetic diversity of livestock. A proposal to open an office in Rome to coordinate the program was expected to gain approval earlier this year but is now held up in Saouma's office.

Cunningham declined to comment when reached by *Science*. But geneticists close to the livestock program blame Saouma for Cunningham's troubles. Saouma, they charge, has taken Cunningham's call for reform as a personal rebuke. Saouma was traveling earlier this week and unavailable for comment.

NIH May Cut Support for Graduate Students

Graduate students, cogs in the biomedical-research machine, may lose their free ride from the National Institutes of Health (NIH). NIH is considering a plan to limit the amount it reimburses universities for grad student tuition, a move that would force schools—or students—to pick up the remaining tab.

In exchange for a student's pledge to do a year of postgrad research for every year of aid, NIH pays schools a grant to cover tuition and a stipend. In 1993, NIH budgeted \$293.6 million for 11,802 students.

But next year, though tuitions across the country will rise, NIH expects to spend the same amount on the same number of grads. To compensate, NIH has proposed that next year NIH training grants cover just 70% of a student's tuition. University officials are al-

ready objecting: "This [proposed] cutback is another example of what is becoming a national trend—removing resources from university science," argues Phillip Sharp, head of MIT's biology department. He estimates the cuts could cost MIT about \$1 million.

NIH officials acknowledge that universities may have to raise their financial support to grads, or else make students pay. But one NIH official sees a silver lining: The new rule would ensure that support is evenly spread across the board. The current system pays schools anywhere from 65% to 95% of tuition. The new system would set the level at 70% for all colleges.

The National Institute of General Medical Sciences has already adopted the 70% rule. Other institutes are expected to decide after the new NIH director arrives.