

Another Look at Secondhand Smoke

A report to be released within a few days by the Congressional Research Service (CRS) could raise doubts about findings that environmental tobacco smoke poses serious cancer risks and enflame the debate on smoking in public places.

The Environmental Protection Agency (EPA) has concluded that secondhand tobacco smoke causes about 3000 lung cancer deaths in U.S. nonsmokers each year (*Science*, 31 July 1992, p. 607). The Occupational Safety and Health Administration (OSHA) used EPA's assessment and its own preliminary analysis in April 1994 to propose a rule, still pending, that would effectively ban smoking in the workplace.

An early draft of the CRS report, done at the request of Representative Henry Waxman (D-CA) and Senator Wendell Ford (D-KY), came down hard on OSHA, concluding the risks are significant only for highly exposed groups such as spouses of heavy smokers. A workshop to evaluate the draft last June turned into a "shouting match" between tobacco industry reviewers and critics from EPA and academia, says a participant, with the critics charging that CRS relied on unpublished, industry-funded data on workplace exposure.

CRS analyst Stephen Redhead, a physiologist and co-author of the report, says it has been "substantially rewritten" in response to comments from both sides. The final version "doesn't come up with any firm conclusions," he says, and "we've been careful with the language" to avoid bias. But the report does "point out some of the criticisms leveled at OSHA" by stressing the uncertainties in secondhand smoke risk assessment, Redhead says. And some observers say Ford plans to use it as ammo to kill OSHA's rule. Like almost everything that touches on tobacco, "this thing got politicized," says one EPA scientist.



LOCKHEED MARTIN

Teamwork. Task force backs joint efforts such as project to build Lockheed Martin's FS-X in Japan.

Report Seeks More U.S.-Japan Tech Flow

A National Research Council (NRC) panel is trying to figure out how to reverse a half-century imbalance in the exchange of science and technology (S&T) between the United States and Japan in ways that will benefit both sides. The trick, say panel members, is to preserve U.S. economic and political interests while enticing Japan to lower barriers to a two-way flow of goods, technology, and people.

"The Japanese have benefited from our much greater investment in defense R&D to strengthen their civilian technology sector," says Gerald Dinneen, a former government and industry official and chair of

the Defense Task Force of the NRC's Committee on Japan, which issued a report last week on the military aspects of the problem. On the other hand, he says, "Japanese technology has not made a measurable contribution to U.S. security needs" such as weapons systems. One remedy could be for Japan to ease its rules on export licenses, Dinneen says. A shrinking Pentagon budget, he notes, will make Japanese technologies even more attractive.

A report on maximizing overall U.S. S&T interests with Japan, including civilian technologies, is due out next spring. Civilian task force chair James Martin of Rockwell International says the goal is to strengthen U.S. competitiveness "in ways that are practical from the standpoint of each country." Sharing information and talent, he says, "is a win-win situation."

Although the final report is intended to foster cooperation between the two countries, says Massachusetts Institute of Technology's Richard Samuels, who will integrate the two task force reports for the committee, "our primary purpose is to say what the U.S. needs to do."

NRC Wants to Know of Isotope Misuse—Now

Spurred by two cases of apparently deliberate poisonings of researchers, the Nuclear Regulatory Commission (NRC) has told institutions to report within 2 days any suspected malicious misuse of radioactive materials. The notice, sent last week to 7000 licensed handlers of the materials, also urges them to draw up programs to prevent misuse of the kind that occurred in August at the Massachusetts Institute of Technology (MIT) and in June at the National Institutes of Health (NIH).

NRC officials say the notice makes clear that such misuse is a public health issue, regardless of scale. MIT had initially decided that an incident in which biology postdoc Yuding Li ingested 579 microcuries of the radioisotope phosphorus-32 was an internal matter, because Li's exposure fell short of the NRC's annual permissible limit of 600 microcuries. Only when MIT officials learned of pending press reports, 8 weeks after the contamination was detected, did they inform the NRC. MIT had already imposed tight restrictions on Li's lab, under Nobel laureate Susumu Tonegawa. The new rules, based on fears that the perpetrator may strike again, require researchers to prove that they've handled isotopes properly before they can receive a new supply.

But MIT officials are not happy with the NRC's notice, although they intend to comply. Chief radiation officer Frank Massé says the Li incident "was never a public health issue" and that NRC is laying down "a smokescreen" to hide the vagueness of current reporting rules. The NRC is to complete its MIT investigation next month; last week it rejected a request from one of the affected NIH researchers to suspend the agency's license to handle radioactive materials.

Adieu, Dufourcq

France's secretary of state for research did not survive a cabinet reshuffle made by Prime Minister Alain Juppé this week. Elisabeth Dufourcq, regarded by many as a scientific lightweight, has been replaced by François d'Aubert, who had been budget secretary. D'Aubert's own research credentials are not obvious. But French scientists might take heart at his recent defense of the government's proposed 1996 budget, in which research was treated fairly well.

British Genome Boost

U.S. genome researchers will wait until February to learn whether they will be funded for a major effort to speed up sequencing of the human genome, even as their British partners charge ahead with a fresh 7-year commitment from the Wellcome Trust of \$75 million, announced last week.

The U.S. National Center for Human Genome Research (NCHGR) has proposed spending up to \$20 million in this area on technology development and high-speed sequencing labs. But the U.S. grant-making process began only this month. And the size and scope of the U.S. effort remain in limbo along with the 1996 federal budget.

Britain thus takes the first decisive step toward sequencing the human genome. The news came on 3 November when the Wellcome Trust announced that it will expand support for John Sulston's research team at the Sanger Center in Cambridge. Wellcome Trust program officer Michael Morgan says the funds will support sequencing by 2002 one-sixth of the human genome (500 million base pairs), with 95% coverage and 99.9% accuracy.

Sulston and Robert Waterston of Washington University in St. Louis proposed such a project early this year (*Science*, 10 February, p. 783). Waterston's proposal went to NCHGR for preliminary review this month and won't receive final word until February. Sulston, meanwhile, says, "We have already completed a lot of work on chromosome 22 with Bruce Roe" of the University of Oklahoma. Next on their list: chromosomes X and 6.