stitute near Paris, agrees: "It is clear that the risk does not stop at 10 kilometers." Indeed, in discussions with *Science*, many radiation and thyroid experts felt that efforts to protect children should go further than those proposed for France, but they were far from unanimous over how far to extend that protection or the best way to provide it.

Baverstock and others question, for example, whether stable iodine should be given to adults after a nuclear accident, which would occur under the French program. "Over about age 45, taking potassium iodide could trigger thyroid dysfunction in people who already have thyroid abnormalities," says endocrinologist Aldo Pinchera of the University of Pisa in Italy. Moreover, as yet, there is no evidence that adult thyroid cancer rates have risen after Chernobyl. "But for young people, the advantages are much greater than the risks," Pinchera says.

Much of the recent enthusiasm among experts for making KI tablets widely available results from studies in Poland, where government authorities ordered stable iodine to be given to all children 16 years and younger after the Chernobyl accident. About 10.5 million children and 7 million adults received a single KI dose—the largest stable iodine protection program ever carried out. Although the tablets were not given out until 3 days after the accident, a follow-up study showed that the thyroids of children and adults who took the pills still absorbed only 60% of the radioactive iodine of those who did not, with very few adverse side effects. And earlier, smaller scale experiments have indicated that if stable iodine is given soon enough, it can be up to 100% effective.

Despite these encouraging results, some experts warn that if KI is put directly into the hands of the population, as is planned in France, people might lose the pills or use them incorrectly. "It worked so well in Poland because it was a dictatorship," says Jan Wolff, a thyroid expert at the U.S. National Institutes of Health in Bethesda, Maryland. In contrast to the French program, for example, the United Kingdom has chosen to stock tablets in schools, police stations, and other locations near nuclear power plants rather than give them directly to the public. Yet, even this policy goes far beyond current practice in the United States, which has about 100 commercial nuclear power plants. With only one or two exceptions, stable iodine is not made available to people living near a nuclear installation. "We prefer to go with protective actions such as evacuation or sheltering," says William Dornsife, director of Pennsylvania's Bureau of Radiation Protection and chair of the Conference of Radiation Control Program Directors. Dornsife says that these measures are "probably as effective as KI, because it takes several hours before KI becomes effective."

But other experts are not convinced. "Imagine evacuating New York City if one of those Hudson River nuclear plants goes," says Wolff. "That would probably kill more people than any accident would." And Evan Douple, a member of the radiation-effects research board of the National Research Council—the research arm of the NAS—says that the NAS is very interested in taking a second look at U.S. policy: "We feel there is some room for reassessing this question." Indeed, Douple adds, although the 7 April meeting in Washington—which will be attended by representatives of several government agencies—was originally convened to discuss whether DOE should distribute KI tablets to workers at its own nuclear facilities, "I am hoping that the meeting will also stimulate interest in getting this issue on the table" on a nationwide basis.

In the meantime, radiation experts on both sides of the Atlantic will be monitoring the French program closely. "From a scientific point of view," says Schlumberger, "all the people should be protected. But whether it is possible logistically is another question."

–Michael Balter

UKRAINE

Tax Law Halts Western Grant Payments

The old adage about the inevitability of death and taxes has taken on a new meaning in Ukraine: A new tax law could spell death for dozens of scientific projects. Several Western organizations have suspended grant payments to members of this country's scientific elite, citing a law that apparently will siphon 20% from each grant. The law could undermine vital support for Ukrainian labs doing world-class science.

Although Ukraine employs 90,000 research staff, most scientists spend little time at the lab bench, instead working at second jobs to supplement sporadic paychecks. Top scientists have avoided this fate largely thanks to Western grants. But the new tax law, issued as a presidential decree last fall, has thrown in limbo at least $20 million in grants to Ukrainian researchers. The situation could harbinger a bigger problem in neighboring Russia, the revised tax code of which could put tens of millions of dollars in grants in jeopardy (*Science*, 7 March, p. 1411).

Five years ago, the United States and Ukraine signed a bilateral agreement that exempts U.S. aid programs from taxes and duties. The first science program to benefit was the International Science Foundation (ISF), which spent more than $100 million on peer-reviewed science in the former Soviet Union. ISF recently wound up its research grant program, and its final tax-free checks in Ukraine were paid out last month.

But other Western agencies may no longer enjoy such exemptions, prompting a preemptive boycott. First to pull the plug was the U.S. Civilian Research and Development Foundation (CRDF), which has postponed initial payments on $2.3 million worth of applied-science projects. CRDF's plight has caught the eye of the U.S. State Department: In a 22 January letter, the department's Richard Morningstar, co-chair of a U.S.–Ukrainian economic committee, warned Ukrainian Deputy Prime Minister Viktor Pynzenyk that the tax policy "could put U.S. assistance funding at risk." In addition, Morningstar wrote, the tax changes, if implemented, would be "a serious obstacle to U.S.–Ukrainian scientific cooperation."

CRDF is not the only program imperiled. The Howard Hughes Medical Institute began paying out 5-year, $150,000 grants to three Ukrainian biomedical scientists in late 1995, as part of its new Eastern Europe program. But the institute has postponed the Ukrainians' first quarterly payments of 1997, before taxes could be levied. "If the standstill continues, the situation may become critical," says Kiev biophysicist Oleg Krishtal, a Hughes grantee. The European Union's INTAS program, too, has temporarily halted payments on 64 projects in Ukraine.

Also worrisome to the West is Ukraine's sales tax on research equipment and supplies. The International Science and Technology Center (ISTC) in Ukraine, a program funded by four countries that supports 1650 Ukrainian scientists with $10.4 million in grants—also now suspended—won an exemption to value-added tax (VAT) on research-related purchases in October 1993. But since ISTC-Ukraine began its operations in late 1995, it has had to pay VAT and has not yet been reimbursed by the Ukrainian government. According to Morningstar, "This problem needs to be resolved at an early date so continued U.S. government contributions to [ISTC-Ukraine] are not put at risk."

The Ukrainian government has not been forthcoming in responding to the agencies' pleas. However, in a letter to CRDF on 4 March, the new Ukrainian science minister, Volodymyr Semynozhenko, suggested the tax problem might be "resolved" by mid-April. If it is not cleared up soon, Ukraine's scientific elite could face the same plight as their less fortunate colleagues: hawking cigarettes or chauffeuring tourists instead of doing research.

–Richard Stone