is "quite as lethal as Ebola," he says.

As for the airlines, Joseph Chan of the International Air Transport Association says it's up to individual carriers whether they will carry the monkeys. Most have refused to ship the three species subject to restrictions, and some have refused to carry any monkeys of any species.

In the meantime, researchers are faced with the prospect of supply shortages that could cripple research. Although most researchers will be able to find domestic sources for their immediate needs, Mortimer Mishkin, a neurobiologist at the National Institute of Mental Health, says that without access to imported monkeys, "research will come grinding to a halt." "To the extent that the permit system turns into a de facto ban for any long term, then it's extremely serious for the medical research community," says Raub.

And even if the moratorium were to disappear overnight, importers warn that there could still be long-term supply disruptions. "The supply side of this primate business is extremely fragile," says Houghton. "It's not like you can stop things and then start them right back up again. We're already looking at a 4- to 6-month downtime even if things were to completely open up again right now."

The import restrictions have been embraced by animal rights activists who have long been fighting what they call the "monkey slave trade." Shirley McGreal of the International Primate Protection League doubts that the present moratorium on imports will halt the trade altogether, but she has hopes that it will force better conditions for the monkeys that are imported. "Animal protection people have been trying for years to stop the monkey trade," she says. "Now a little virus has done it for us."

The situation is showing some signs of loosening up. McCance says CDC has now received two applications for import permits, and he expects that some permits will be issued within the month. On 16 May, CDC mailed out specific criteria for releasing from quarantine animals imported before the restrictions were imposed. If they show no evidence of new infection and a veterinarian declares they are healthy, they may be released to users, even if they do have antibodies to filovirus indicating a prior exposure. CDC warns that "data are insufficient to determine whether monkeys that have completed import quarantine are noninfectious," and users are urged to use safe handling procedures.

But getting new supplies into the country would still pose a problem unless New York State eases its requirements and the airlines resume shipments. ■ JOSEPH PALCA

A European Superlaser?

Five European countries are quietly considering a proposal to build the world's most powerful research laser. Next month, senior officials from the central funding organizations of France, West Germany, Italy, Spain, and the United Kingdom will meet to discuss a confidential report that sets out options for a European High Performance Laser Facility. The total cost of such an undertaking is estimated to be $200 to $300 million.

The report, produced by a working group established by the five organizations, calls for a two-stage development process that would result in a machine three to four times as powerful as Lawrence Livermore National Laboratory's NOVA, which is currently the world leader.

The goal is to create a laser capable of delivering 100 kilojoules (kJ) of energy at ultraviolet wavelengths. "That kind of power is very dramatic indeed," notes Michael Key, director of the central laser facility at the Science and Engineering Research Council's Rutherford Appleton Laboratory, who cochaired the working group that produced the report.

The report says that two technologies are capable of delivering the goods. One is the neodymium-glass laser, which is similar to the familiar ruby-rod laser. The big advantage is that its technology is very well understood. "One could build it today, it's only a question of money," says working group member Sigbert Witkowski, director with special responsibility for lasers at the Max Planck Institute for Quantum Optics, outside Munich. But neodymium-glass lasers have some disadvantages, too. They are inefficient, and hence costly, and they take several hours to recycle after each shot.

More promising is the so-called excimer laser, based on a mixture of krypton and fluorine gases. This system is more energy-efficient and is capable of being fired very rapidly. But the technology is still being developed. The largest KrF laser is the Aurora laser at Los Alamos, which delivers 1 kJ. "The step from 1 kJ to 100 kJ in this new technology is too big," says Witkowski.

For that reason, the report recommends an initial phase in which two intermediate power lasers—one neodymium-glass, one KrF—would be built side by side. Researchers would then be able to compare their performance before picking one for the final assault on 100 kJ.

One goal of the European High Performance Laser would be to free European laser scientists from their dependence on high-powered machines in the United States and Japan. Phase one would do that. Phase two—regardless of the chosen technology—would put them well ahead of their U.S. colleagues.

But transatlantic competition is not the only driving force. A superlaser would enable scientists to investigate some fundamental questions of physics, such as the interactions between atoms and electromagnetic fields and the behavior of plasmas. The intense pulse of such a laser would also create conditions even hotter than the core of a burning star. "It's not just red hot," Key explains, "it's x-ray hot." That means the superlaser could become the most powerful source of x-ray pulses on Earth. And that may speed development of x-ray lasers, which could enable scientists to create holographic pictures of single genes and other details of living organisms.

European researchers also have their sights set on inertial confinement fusion. When a powerful laser is trained on a pellet of hydrogen, the intense heat ignites a tiny atomic fusion reaction—a process Key calls "micro-miniaturizing the hydrogen bomb." The rapid-fire capability of KrF lasers holds out the hope of producing several such fusion explosions a second, which would be required for a fusion reactor. Such a reactor would be the fusion equivalent of an internal combustion engine, as distinct from the steady burning of magnetically confined fusion.

The five funding agencies are due to consider the working group's report on 7 July. Preliminary indications are mixed. Professor Edouard Fabre, director of France's high-intensity laser laboratory, and a cochair of the group, says his paymasters may want to "pause" before committing themselves to another expensive project. "It's a question of funding, not of physics," Fabre notes. Witkowski says he has heard, unofficially, that the report enjoyed "a friendly reception" in Germany. Italy, Spain, and the United Kingdom are saying nothing. If the report is accepted, there will be a year of what Key calls "serious engineering design." Phase one would take 3 or 4 years and phase two a further 3 or 4 years. ■ JEREMY CHERFAS