British BSE inquiry examines scientific involvement

The way that government agencies in Britain seek and respond to external scientific advice is expected to be a key theme to emerge from a public inquiry into the origins and handling of the crisis over Bovine Spongiform Encephalitis (BSE) in British cattle.

The inquiry was announced by agriculture minister Jack Cunningham, shortly before Christmas, and is being held jointly by the Ministry of Agriculture, Food and Fisheries (MAFF) and the Department of Health. Cunningham has said that he wants the inquiry to report by the end of the year.

By persuading ministers from previous Conservative administrations to provide details on political decisions taken as far back as the mid-1970s, the inquiry is expected to throw important light on how BSE originated and how its emergence related to changes in the meat processing industry. But the closest attention is likely to be paid to the way that MAFF tried to play down the BSE threat over many years, both in public and to the academic community—even when faced with scientific evidence that it was spreading rapidly in British herds and was becoming a major threat to public health.

"It was a case of the science being manipulated to fit the economics," says Stephen Dealler, a consultant microbiologist based at Burnley Hospital in Lancashire, who was one of the first to argue that scientific evidence suggested that the BSE threat—and in particular, its possible link to Creutzfeld Jakob Disease (CJD) in humans—was being downplayed by the ministry in the interests of the British beef industry.

The inquiry will be headed by a prominent appeals court judge, Lord Justice Phillips, who has already earned wide respect for his handling of complex cases, including that against those involved in the affairs of the suspect media tycoon Robert Maxwell. Phillips will be supported by a scientific assessor and an assessor experienced in public administration. He has been asked "to reach conclusions on the adequacy of the response [to BSE and the so-called `new-variant' CJD (nvCJD)], taking into account the state of knowledge at the time."

One senior scientific adviser emphasizes the sharp contrast between the handling of data in the early 1980s from the AIDS outbreak in the United States and that of the BSE outbreak by MAFF, pointing out that this reflects the different attitude of administrators as much as government rules. In the former case, authorities moved rapidly to involve independent researchers in identifying the problem and suggesting strategies to contain it; in the latter, the ministry maintained tight control not only over the data itself, but also on how it was presented both to the public and to the scientific community.

IMAGE UNAVAILABLE FOR COPYRIGHT REASONS

"We have to find out not only why BSE appeared and spread in the way it did, but why insufficient scientific research was carried out into the problem at the time, and why the academic community did not complain about this more loudly," says Dealler. "One of the problems, for example, was that MAFF was determined to do all the scientific work itself, and did not permit the Department of Health to be involved," he adds. "But whereas the health department tends to take action on problems, even if it may play these down in public, MAFF not only told everyone that everything was okay, but also refused to act adequately behind the scenes."

Some government critics had hoped that the inquiry would be given a stronger and broader remit. "We would have liked to see a full judicial inquiry with the power to subpoena witnesses, which we think would have been more effective," says Julie Shepherd, senior public affairs officer with the Consumer Association. "We are also worried about the time window. While we are pleased that the inquiry will go back to the 1970s, we also find it extraordinary that they will not look at anything that happened after March 1996."

The announcement of an inquiry, which Dealler and others have been pushing for ever since the then Conservative government admitted in March 1996 that there *was* evidence of such a link, coincides with the latest official data on nvCJD. This shows that there were ten `definite and probable cases' of nvCJD in the 11 months up to November last year, the same number as in the previous year. The figures have led to some hope that Britain may not be heading for the nvCJD epidemic that has been feared, even though researchers are warning that it is too early to draw any firm conclusions about long-term trends.

DAVID DICKSON, LONDON

Xenotransplantation under FDA spotlight

Xenotransplantation has once again become an area of high priority for the US Food and Drug Administration (FDA), which has participated in two recent meetings aimed at addressing growing concerns about the technology.

As *Nature Medicine* went to press, a revision of the US department of Health and Human Services xenotransplantation policy guidelines issued in September 1996 was expected following its discussion at a public forum in Washington on January 22nd. Some researchers hoped that a presentation at the meeting by Fritz Bach—published as a commentary in this issue (p 141) and as correspondence in *Nature* (January 22nd, 1998)—calling for a moratorium on clinical trials of xenotransplantation until ethical aspects of the technology have been addressed, would postpone release of the updated guidelines (*see* Editorial, p 131).

At an earlier meeting last December, an expert panel of the FDA's Center for Biologics (CBER) subcommittee made its debut, specifically to examine ongoing clinical trials that involve the transplantation of pig organs and tissues. John Logan,

vice president of R&D at Baxter Healthcare's unit in New Jersey—which is conducting Phase I trials using transgenic pig livers *ex vivo* as a bridge treatment for patients with severe acute liver failure—believes that "the benefits of using porcine livers to save lives while patients are waiting for transplants are tremendous and seem to far outweigh the risks."

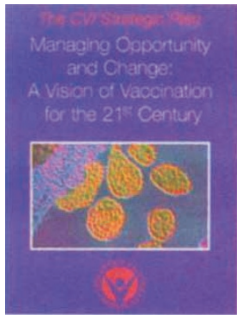
The panel's mandate was to consider current knowledge on the risks of porcine endogenous retroviruses, including recent research indicating that a porcine endogenous retrovirus (PERV) is capable of infecting human cells *in vitro*.

Jonathan Allan, a virologist at the Southwest Foundation for Biomedical Research, Texas, and a member of the CBER subcommittee, told *Nature Medicine* that he strenuously urged that the FDA and Public Health Service be more cautious with respect to transplanting pig organs, which have until now been considered less risky than those of primates. "I'm not optimistic that the revised guidelines will be as stringent as necessary," says Allan.

The subcommittee also discussed laboratory assays and diagnostic procedures currently in development by the FDA to test for the presence of these viruses, and strategies for screening patient samples to prevent their transmission.

VICKI BROWER, NEW YORK

CVI aims to speed products to market



It takes between 15–20 years from licensing a vaccine in an industrialized nation to its widespread use in less developed countries where it is most needed. However, the Children's Vaccine Initiative (CVI) hopes its new strategic plan, issued January 12, will cut that timetable by a decade, according to Roy Widdus, coordinator of the CVI. To do so, the group, a broad coalition sponsored by the World Bank, the World Health Organization, UNICEF, UNDP, and the Rockefeller Foundation, must convince developing nations to better recognize disease burden and to understand that vaccination is worth the investment, Widdus told *Nature Medicine*. Vaccination makes economic sense: ensuring that more children survive will create a larger pool of future "breadwinners," he says.

A spokeswoman for US pharmaceutical company Merck & Co—one of the largest vaccine manufacturers in the world—agreed that a huge obstacle for vaccine makers is "that vaccines are undervalued" by many governments. She explained that it is tough to convince nations to purchase something such as the company's hepatitis B vaccine, when it may triple a country's entire vaccination budget.

Widdus acknowledges that scant resources are a factor in new product adoption, but he added, "the problems that hinder these new vaccines getting into use include money, but are not limited to money." The CVI strategic plan calls on governments to harmonize vaccine approval processes and improve intellectual property protection, which will encourage pharmaceutical companies to market vaccines worldwide.

CVI also hopes to convince manufacturers to develop products that are easier to administer—orally and in combination—and to build larger production capacity earlier in the vaccine development process. When a vaccine has been approved in an industrialized nation, the lack of an immediate and sizeable market means that there is typically a lag phase during which vaccine yield is increased and production quality is improved. But the CVI plan calls for that phase to be shortened so that demand in developing nations can be met more quickly.

CVI is already working with Wyeth-Lederle Vaccines to bring its oral rotavirus vaccine to needed areas once US Food and Drug Administration approval is granted. Obviously, the US is not the primary market for this vaccine, says Widdus. "We've had lots of discussions with Wyeth-Lederle about this and they recognize, as I think most of the American companies do, that the vaccine market is now a global one. They need to think beyond their traditional home base, which is a small volume market."

The CVI plan urges an increase in the deployment of existing vaccines, such as polio, hepatitis B, hemophilus influenza b, rubella and yellow fever. Full use of these vaccines could save up to four million lives a year, say CVI. The measles vaccine is the most under-used: CVI estimates that measles causes 1.1 million child deaths a year, half in sub-Saharan Africa.

Widdus is optimistic: "what we'll be able to do in the next decade or so is much, much more than we've done up to this point." But he warns, "to reap the benefit of the potential explosion of new vaccines, we have to do it in an organized, systematic fashion," adding that CVI aims to be the catalyst and coordinator of this effort.

ALICIA AULT, WASHINGTON D.C.

NIH opens top level biosafety facility

The National Institutes of Health (NIH) is to become the third facility in the US to have a biosafety level-4 laboratory (BL-4), equipped to handle the most dangerous pathogens known. The $4.9 million facility is scheduled to open early in 1998. Currently, the Centers for Disease Control and Prevention (CDC) in Atlanta and the U.S. Army Medical Research Institute of Infectious Diseases (USAMRIID) in Maryland are the only such facilities in the country.

BL-4 is the designation for the highest level of containment, and requires the most stringent security measures. However, unlike the CDC and USAMRIID labs, the NIH lab does not plan to investigate new disease outbreaks—at least not at the present time. Initial work will focus on drug-resistant strains of tuberculosis (TB) that pose a growing public health threat around the world. The increased research in this area comes in response to the global AIDS crisis, which has seen strains of TB flourish and to a 1991 US Congress order for NIH to accelerate its work on new TB strains. Around 2,000 people die from TB in the US each year and the disease infects 30 million people worldwide, killing three million every year.

Plans for similar labs in Canada and Japan have been opposed by local residents, but the reaction of the local Bethesda community outside Washington where NIH is located has been surprisingly low-key. This may be because NIH officials have stressed it is unlikely that the facility will become the focus for studying exotic or unidentified deadly agents. And in recent years, partly as a response to earlier clashes with the community over such issues as medical waste disposal, lighting and parking, NIH has opened up an aggressive dialogue with its neighbors to discuss mutual concerns. Ginny Miller, who chairs the Wyngate Citizens Association, which represents 1,640 households in the NIH neighborhood, agreed that residents are comfortable with the coming facility. "The NIH has been communicating with us, and I do think all our questions have been answered," she said.

MARLENE CIMONS, WASHINGTON, D.C.