

For the want of a test...

As Europe wrestles with its BSE crisis, the top priority is to develop a diagnostic test that can reliably identify animals incubating the disease and people incubating its human form.

“We are in the midst of an epidemic of fear,” said James Mason, director of the US Centers for Disease Control, in 1985. He was referring to the public’s reaction to AIDS, then a newly emergent disease.

Fast-forward to 2001, and there is another epidemic of fear. Over the past few months, it has become clear that bovine spongiform encephalopathy (BSE) is a pan-European problem. Countries such as Germany, Italy and Spain, which for years regarded themselves as BSE-free, have been forced to admit that their cattle herds are harbouring the disease. Consumers feel betrayed, and sales of beef have plummeted across the continent. The shock wave is also being felt in the United States, where federal agencies are scrambling to prevent the disease crossing the Atlantic (see *Nature* **409**, 441–442; 2001).

But there is one important difference between AIDS in 1985 and BSE in 2001. In March 1985, the US Food and Drug Administration approved the first blood test for HIV infection. At a stroke, it became possible to screen donated blood for the virus. For those lucky enough to live in countries with well-regulated blood supplies, avoiding AIDS became primarily a matter of abstaining from risky sexual practices.

By contrast, there is still no reliable way to identify cattle incubating BSE, or people infected with its human form, variant Creutzfeldt–Jakob disease (vCJD). In an attempt to put some figures

to the BSE epidemic, the European Commission has instituted a programme of diagnostic testing of brain tissue from slaughtered cattle (see page 658). But while the tests being used may have some value in picking up preclinical cases, they have not been validated for this purpose. Unfortunately, the equivalent of the HIV blood test — a reliable diagnostic capable of identifying infected animals or people soon after they become infected — is not yet available.

For agencies confronting the BSE epidemic, producing such a test should be a top priority. Not only would it be a valuable epidemiological tool, but it would also offer a means to reliably exclude infected animals from the human food chain. And because potential therapies are likely to require intervention before symptoms appear, progress in diagnostics is also key to saving people who are incubating vCJD (see page 660).

But there is a danger that the validation of candidate diagnostic tests could become a bottleneck. It will require the tests to be put through their paces on tissue samples taken from animals that were deliberately infected but have yet to show any symptoms. Currently, the only source of such material is Britain’s Central Veterinary Laboratory in Weybridge, Surrey. To ensure that sufficient reference material is available, the European Commission should move urgently to create a central repository. ■

Handling (mis?)appropriated data

Introducing a policy to ensure due credit for unpublished data.

The practice of posting unpublished data in publicly accessible databases is widespread in the genome sequencing community. Given the years it can take to produce a finished sequence, such openness makes a significant difference to the rate at which science and its applications can develop. But there is a downside. Researchers who post data in this way may lose the opportunity to exploit them as others promptly seize the data and run with them. That is a (sometimes reluctantly) accepted consequence of openness. What is much more controversial is a refusal by the appropriators of posted data to give credit to the originators of those data.

Previously (see *Nature* **405**, 719; 2000), we stated some elementary principles in our approach to this issue. Briefly, such posting of unpublished data does not count as prior publication, but neither is it protected from appropriation and publication by others in any way, unless a licensing agreement is explicitly required. The latter approach has been adopted, for example, by The Institute for Genomic Research in Rockville, Maryland, whose licensing agreement (see <http://www.tigr.org/tdb/license.shtml>) requires users to agree not to use TIGR’s unpublished data for global genomic analysis before their publication of a complete genome paper.

We also urged more from the community by way of sensitivity to the interests of originators. Some sequencers have urged that *Nature* simply refuse to consider papers where inadequate credit is given. And it has recently been suggested that appropriators who do not obtain written consent from originators before making use of these

data in publications are by definition misappropriating the data and committing fraud (see Hyman, R. W. *Science* **291**, 827; 2001).

While we agree that seeking consent is important, we do not accept that using data if consent is refused necessarily constitutes fraud, as consent can sometimes be withheld for questionable reasons. However, there is also a need to ensure that appropriated data are being used in full awareness of their technical limitations, given that they are sometimes preliminary or may be subject to qualifications that only their originators are fully aware of. And we do believe that practical steps can be taken to ensure that credit is given where, as far as it is possible for us to judge, we believe it is due.

Accordingly, we have decided to adopt the following practice. Appropriation of uncredited data will not prevent us from sending a paper out for prompt review. But we will require written assurance that authors are not violating any originators’ data-licensing agreement. We will encourage our referees to be alert to the use of appropriated unpublished data from databases. Where there are concerns over credit, we will usually seek advice from an originator of the data in addition to the usual refereeing process. We would not be giving originators a veto: where disagreements arise, we will use our judgement, having consulted referees over technical considerations if necessary, and will usually insist on an acknowledgement as a condition of publication. As with all policies, we shall keep this under review, and welcome the opinions of readers, which should be sent to nature@nature.com. ■