The items for costing include the cost of installing a telephone line, converting the socket, and renting the line; the cost of renting an alarm and monitoring (local authorities may not charge but usually the charge ranges from £80 to £160 a year; commercial firms charge about £250 for the first year and £150 for subsequent years); and the costs of buying an alarm, which ranges from £170 to £320, and monitoring fees (local authorities or charities charge £10 to £70 a year and commercial firms charge £20 to £150 a year). Alarms are zero rated for value added tax if supplied to someone who is chronically sick or disabled. Details are obtainable from the local taxation office.

I thank Tunstall Telecom, Whiteley Lodge, Whiteley Bridge, Yorkshire, for providing the photographs.

Appendix

USEFUL ADDRESSES

Help the Aged, Community Alarms Department, 16-18 St James's Walk, London (01 253 0253)

Age Concern England, 60 Pitcairn Road, Mitcham, Surrey, CR4 3LL. A guide entitled *Calling for Help, a Guide to Emergency Alarm Systems* is available from this address.

Wolsey Electronics Ltd, Gellihirion Industrial Estate, Pontypridd, Mid Glamorgan CF37 5SX (044385 3111)

Disabled Living Foundation, 380-384 Harrow Road, London W9 2HU (01 289 6111)

Care Trust, Care House, Bigland Street, London E1 2ND

The Home Call Trust, 34 Logan Road, Bristol BS7 8DR

Oxfordshire Council for Voluntary Service, Pratten Building, New Road, Oxford OX1 1ND

- 1 Hunt A. *The elderly at home*. London: Office of Population Censuses and Surveys HMSO, 1978.
- 2 Research Institute for Consumer Affairs. *Dispersed alarm systems: a guide for organisations installing systems*. London: Research Institute for Consumer Affairs (RICA), 1986.
- 3 Feeney R, Galer M, Gallagher M. *Alarm systems for elderly and disabled people*. Loughborough: Institute of Consumer Ergonomics, 1981.
- 4 Wilcocks AJ. *Care and housing of the elderly in the community*. Nottingham: Institute of Social Welfare, 1979.

Scientifically Speaking

Not the way to settle disputes

Bernard Dixon

I was driving straight ahead in the right hand lane of a one way system when a car slightly ahead and to the left lurched across my path without even signalling its lunatic intentions. Bang. My car's near side wing, headlight, and bonnet crumpled under the impact, and both vehicles scrunched to a halt. Dominant among the thoughts flashing through my cerebral cortex was sheer disbelief that anyone could behave so atrociously.

Then, almost as quickly as the incident itself, came sympathy, apologies, and offers of reparation. The guilty driver expressed concern for my well being and that of my passenger, admitted making a serious error, apologised repeatedly, and insisted that his company would do everything possible to see that I did not suffer financial or practical inconvenience. He offered to make a hire car available for the entire time that my own vehicle was off the road and handed me his company business card and the name of a Mr X, a colleague who would make the appropriate arrangements. Although another motorist had stopped and given his name and address as a witness prepared to confirm that I was the totally innocent party, his help would obviously not be required.

Wrong. An hour later, when I rang Mr X, the picture changed dramatically. Yes, he had received a full report on the incident from his colleague. But both now firmly rejected any suggestion of blame for the crash. The offer of a hire car was simply laughable. Everything was now in the hands of their insurers.

Over six months later the matter was finally settled. The other party's insurance company settled the repair bill and my hire car charges were met too. But I had to fight every inch of the way.

Never admit liability following a motoring accident even when it is incontrovertibly your fault and there are witnesses to confirm as much. Do not, when involved in divorce proceedings, try to persuade your lawyer to behave reasonably and as amicably as possible in the circumstances, rather than in a spirit of furious adversarial combat. Do not, as a manufacturer of alcoholic beverages, concede that your products,

although used with benefit and pleasure by many, can cause serious ill health when misused or abused.

There are many ways in which both the professional conventions and codified formalities of the legal process interfere with what would otherwise be more sensible and agreeable ways of settling disputes and dealing with issues of social responsibility. In the past scientists and their work have been affected less frequently and less damagingly by these aspects of the law than have many other sectors of life. True, the patenting of processes (and now organisms) in biotechnology is increasingly instanced as a threat to the traditional openness of the research community in communicating findings through the journals and scientific meetings. But rather than the law itself, the underlying problem here is the growing need for commercial confidentiality in domains formerly categorised as "pure" science. It is also important to remember that while the patent system undoubtedly delays publication of research results it actually *compels* disclosure.

Surprisingly, perhaps, the one discipline within which the law really is now beginning to interfere with conventional scientific intercourse is that of ecology and environmental research. As more and more sectors of the biosphere become battlefields for claims and counterclaims regarding industrial pollution, whether between companies and countries, or countries and countries, dramatic changes are occurring in the mores of what were formerly conspicuously open and co-operative fields of science. Where once there was unfettered exchange of results, ideas, and materials, field workers now complain of secrecy, suspicion, and rancour.

Research teams who pass and don't speak

Typical of the way the wind now blows is the character of the work that has developed along the Alaskan coastline since the *Exxon Valdez* spewed 11m gallons of crude oil into Prince William Sound in

Middlesex HA4 6AW
Bernard Dixon, PHD, science
writer

Br Med J 1990;300:1715-6

March last year. Several research teams have been busy in the oil polluted waters and on the beaches stretching from the spill site itself to Kodiak Island 300 miles south in the Gulf of Alaska. But the investigators scarcely talk to each other and they are certainly not being allowed to publish their results. No journals or symposia will hear of these data until well into the 1990s, if ever. Instead, lawyers and economists are beginning to use the findings to assess the cash costs of both the initial damage and the subsequent restoration work. The United States and Alaskan governments are expected to present Exxon with a claim for up to \$2 billion—which, in turn, the company will contest on the basis of results compiled by its scientists, lawyers, and economists. Meanwhile, even this remarkable opportunity for peer review and quality control by parallel study is being wasted.

"Under ordinary circumstances, one team of scientists chancing upon another in the remote Alaskan wilds would exchange greetings, compare notes, and trade tales of methodology and findings," writes Mark Holman Turner.¹ But in today's litigious circumstances these things do not happen. Although craft carrying "rival" research teams pass each other and occasionally land on the same stretch of blackened

beach to conduct analyses and take samples, "biologists from different boats measure their words carefully. The legal aftermath of the spill has forced the likes of Stephen Maclean, of the University of Alaska's Institute of Arctic Biology, to maintain distance from scientist colleagues working for Exxon. 'We know they're out there,' Maclean says. 'But we have been told by the [government] lawyers that we are not to cross paths in any substantive way.'"

The practical repercussions of severe restrictions in publication are bound to include substantial delays in other parties learning lessons from the *Exxon Valdez* incident and applying that knowledge in dealing with spills elsewhere in future. There has also been unnecessary and costly duplication of effort between the 300 scientists working for the *Exxon Valdez*'s owners and a comparable number ranged against them. But one of the saddest consequences, surely, is the divisiveness which the legal process has introduced among researchers engaged on what both sides would no doubt like to see as a common goal of environmental protection and improvement.

1 Holman Turner M. Oil spill: legal strategies block ecology communications. *Bioscience* 1990;40:238-42.

Letter from Brasilia

Cutaneous leishmaniasis

P D Marsden

Leishmaniacs, as we call them, for they are so enthusiastic about this fascinating disease, are the world experts in the use of the heavy metals—the mainstay of nineteenth century treatment. More use is made of pentavalent antimonial drugs to treat leishmaniasis than of all the other heavy metal treatments combined, including arsenical drugs in third stage African sleeping sickness, gold in rheumatoid arthritis, and platinum in testicular tumours. Yet this is nothing to be proud of as the treatment of leishmaniasis has not changed for 40 years. I reviewed antimonial treatment a few years ago when I realised that I probably would not use anything else. Only two pentavalent antimonials are available: Pentostam (Wellcome) comes in a 100 ml flask containing 100 mg antimony/ml, which when I last asked cost £72 in England, and Glucantime (Rhodia, Specia, and Rhone Poulenc) comes in a 5 ml ampoule (85 mg/ml) and costs the Brazilian government about US\$1 per ampoule. Although the government bought well over 1 million ampoules in 1989, it is not even beginning to meet the problem. Only the Brazilian and Venezuelan governments in South America supply the drug to practitioners free. Infected patients cannot afford the drugs, and this is one reason why development of new treatments is so slow—there's no market. The companies tried to stop manufacture of their respective pentavalent antimonial compound, presumably because they were not making much profit. In India and China the governments make their own drug, but the one attempt to do this in Brazil failed because the product was too toxic.

Pentavalent antimonial drugs are the recommended treatment for all forms of leishmaniasis, but I will consider here the cutaneous form. It is essential that doctors know the types of cutaneous leishmaniasis present in their area so that they can manage patients effectively. In Brasilia more than 90% of our patients are infected with *Leishmania viannia braziliensis* so we

treat all patients with maximal antimony treatment to promote early healing and avoid metastasis. Occasionally we see patients from the Amazon region with *L viannia guyanensis* infection, which causes clinically distinct skin lesions. In *L viannia braziliensis* infections ulcers are deep, usually single, and slow to heal even with treatment, whereas with *L viannia guyanensis* they are superficial, small, and often multiple. Distribution of the *guyanensis* subspecies is said to be restricted to that of its animal reservoir, the two toed sloth (*Choloepus didactylus*), which is Amazonian. Our laboratory has also identified *L mexicana amazonensis* infections, but these are rare because the sandfly vector, *Lutzomyia flaviscutellata*, rarely bites man and the infection is maintained in rodents. When this infection occurs in man it usually produces a limited skin granuloma, but it is also responsible for diffuse anergic leishmaniasis (Convits' syndrome), which results in massive skin invasion with multiple nodules resembling lepromatous leprosy. In 15 years we have never seen Convits' syndrome in Brasilia or in our field area in Tres Bracos Bahia but there are many reports from other parts of Brazil. Why only this subspecies of leishmania seems to produce this syndrome requires investigation.

Identification and diagnosis

We have worked hard to develop a reliable laboratory that can identify the subspecies associated with our clinical work. Most clinicians do not have such a facility, but the World Health Organisation has set up a network of reference laboratories, and a taxonomic study can be arranged through one of these. Identification is laborious, particularly with *L viannia braziliensis*, which is difficult to culture and requires sophisticated technology such as isoenzyme analysis, monoclonal antibody reactions, and evaluation of kinetoplastic

Núcleo de Medicina Tropical, Universidade de Brasilia-CP 153121, 70.010 Brasilia DF, Brazil
P D Marsden, MD, professor

Br Med J 1990;300:1716-7