

Stress Syndrome"). The disease, which strikes apparently healthy people and leads to death from suffocation caused by fluid in the lungs, has now been confirmed in at least 19 cases. With the IXth international conference on AIDS just over in Berlin, it is natural that the appearance of URDS should suggest that another deadly epidemic has sprung upon us. Can that be so?

It is, of course, far too soon to know. At this stage, there is no more to go on than in the first few days after the appearance of Legionnaires' disease among war veterans gathered at a hotel in Philadelphia. (Epidemiologists, virologists, bacteriologists and Navajo Indian medicine men are said to be working around the clock at Four Corners in a search for the cause of URDS.) But the incident is a clear reminder of the warnings issued recently by a committee of the Institute of Medicine under Joshua Lederberg, former president of Rockefeller University, to the effect that human beings should not become complacent about threats from microorganisms not yet identified even by their effects.

The best guess is that URDS is caused by a variant of the rodent-borne Hantaan virus originally isolated in 1976 from the lungs of a field mouse in Korea, near the Hantaan river. Circumstantial evidence has been provided by Navajo medicine men, who have told US health workers that the Four Corners reservation has an unusually large rodent population this year because the pinion tree has borne nuts year round, apparently for only the third time this century. But Hantaan virus has been isolated from only three samples of fluids from infected patients and it would be premature to suppose that the cause of URDS has been identified.

Although hantaviruses are common in Asia, they have only recently been recognised elsewhere. But in the past few years, they have shown up in places as different as the former Yugoslavia, in the harbour of Baltimore, Maryland, and the fields of Texas in the United States. What their endemic future outside their original habitat may be is, for the time being, a matter for guesswork only. So is the route by which they have spread beyond Korea.

Only if the Four Corners outbreak is the harbinger of a more permanently established infection is it likely to seem worthwhile to investigate that question. But the general principle is that, with the passage of time and the greater movement of people and goods from one place to another, geographical barriers to the spread of infection are continually attenuating.

So what should be done? In all likelihood, the Four Corners outbreak will be brought under control. The temptation then will be to forget about the incident. But that would be shortsighted. Of necessity, it cannot be long before there is a recurrence of the same trouble somewhere else. And even if the fuss at Four Corners blows over quickly, nobody can be sure that the next outbreak will be so easily dealt with. And in all likelihood, the Four Corners outbreak will be brought under control. But this incident is a telling reminder that there are reservoirs of microorganisms to which people have not yet been exposed not merely in feral animal populations but in parts of the world that have hitherto been isolated by geography. □

Pity poor understanding

Government ministers everywhere need a crash course in understanding what science is all about.

CAMPAIGNERS for better public understanding of science (*Nature* included) often give as a reason for their sense of urgency the fact that citizens in modern democracies are increasingly required to express their views on issues with significant scientific content. How, the argument goes, can the person in the street decide whether to vote for a tax on fossil fuels if he or she does not appreciate the link between atmospheric carbon dioxide concentrations and global temperature? What is the voter to make of a proposed ban on chlorofluorocarbons, if he does not know whether they destroy stratospheric ozone or contribute to the greenhouse effect? (Regular readers will know that the answer, at least in principle, is "both".)

Real-world democrats may point out that this argument neglects the role of our elected representatives: do we not delegate to them the job of getting to grips with all the facts behind the issues, whether social, economic or scientific? Is that not what we pay them for? If so, then it is to be hoped that citizens of other countries are getting a better deal than the British, who two weeks ago heard their Secretary of State for the Environment, Mr John Gummer, mistake the ozone hole for the greenhouse effect in a political interview broadcast on the radio. In discussing a proposed tax on domestic heating fuel, he made the resounding statement, "... if we are going to do something about the ozone layer, we have to ... make the use of fuel more expensive...". Nor was this an isolated incident: in the past year, listeners to the national radio network in Britain have heard one Conservative Member of Parliament say that radio waves escape from the Earth's atmosphere through a hole in the ozone layer, and another that dogs do not have DNA. (The last comment, in a discussion of legislation to control dangerous breeds of dogs, was meant to convey the difficulty of defining a breed, as opposed to a species — but knowing what the speaker meant does not make it any less of a gaffe.)

The charitable view that these solecisms are mere slips of the tongue is, sadly, not tenable. In Gummer's interview, it is true, the previous discussion had ranged over both global warming and the ozone hole. But then why did no one else participating in the discussion — neither the interviewer, nor the two opposition politicians, who seemed all too ready to criticize the hapless minister for other errors — correct the mistake? The remark about DNA was also made in an adversarial setting, with plenty of opportunity for point-scoring if an opponent had been so minded and knowledgeable; sadly, no points were scored.

Not long ago, the US public rightly considered it scandalous that their vice-president could not spell "potato", and thought that Latin Americans speak Latin. When a scientific clanger can earn its perpetrator the same degree of opprobrium, we shall know that the 'public understanding of science' has finally been attained. □