Specific health advice continues to be inconsistent, ranging from the mention of just one disease to tabular information. Some of the incorrect information given at best could give travellers a false sense of security and at worst could result in their risking a preventable infection.

Clearly, the travel trade continues to rely on the availability of other sources of information, with most brochures carrying only general advice and 50 of the remaining 56 recommending that further advice should be taken. The number of brochures (58) that recommended that travellers should seek additional information from their general practitioner seems inappropriately low, considering that general practitioners have shown enthusiasm for providing advice² and are ideally placed to do so, having knowledge of the traveller's lifestyle, immunisation history, and relevant medical history such as allergies and of the side effects of vaccines³ as well as ready access to computerised database information on this subject.⁵°

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Gulf war casualties revised

EDITOR,-The recent publication of revised estimates of casualties in the Iraqi army during the Gulf war provides a welcome opportunity to restore a sense of balance to the literature.1 Using sources such as records of war graves and personal interviews with prisoners of war, John Heidenreich, an American analyst, has estimated that up to 1500 Iraqi deaths occurred in the air campaign and an "absolute maximum" of 6500 in the ground campaign. In the aftermath of the liberation of Kuwait there were hugely inflated estimates of the "body count," with figures of up to 100000 Iraqi dead given to the press. Rumour and speculation, coupled with the pictures of material destruction on the highway between Kuwait and Basra reinforced the public impression that "Desert Storm" had been a wholesale slaughter of men and machines facilitated by high technology.³

The reality seemed different to the surgeons who were in direct support of 1st Armoured Division. During the lightning strike through Iraq and Kuwait the two brigade field dressing stations which served both the British troops and the collapsing Iraqi army each cleared well under 100 casualties, mostly with minor injuries. Meanwhile, huge numbers of ragged, hungry, demoralised, and leaderless prisoners were taken throughout our area of operations. Given the usual casualty ratios of three wounded for each dead combatant, we would have expected to see thousands of casualties in the four days of the advance if the subsequent estimates of casualties were to be believed.

It seems likely that the Iraqi leaders recognised the loss of Kuwait long before the final battles of Desert Storm and left an unwanted army of ill equipped Kurdish and Shia conscripts to cower in their forward trenches, trapped between the allied armies and the execution squads of the Republican Guard. Some recollections, such as of truckloads of prisoners of war cheering British soldiers into Iraq and of the welcome embraces of Iraqi field medical officers, now take on a clearer perspective.

The actual number who died and the cost in human suffering during Desert Storm will never be known; the number who died, however, is probably well short of the number who die in the United States each year through misuse of firearms by civilians or who are dying from the self imposed horrors of Yugoslavia. It is a testimony to the professionalism and strategy of the allied campaign that it achieved its goals with so much less suffering than might have been.

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Traumatic rupture of the diaphragm

EDITOR.—The lesson of the week about delayed presentation of a traumatic rupture of the diaphragm which had a fatal outcome' reminds me vividly of a case that I failed to diagnose some years ago. A man of 21 had received a stab wound to the left side of the chest three years before, which had been treated conservatively. He came in one evening complaining of vomiting and some vague epigastric pain. He was not particularly unwell and was treated conservatively with a view to investigating him further by endoscopy the next day. Chest radiography was not performed as chest signs had been reported as normal by the admitting house surgeon. During that night he collapsed and died, much like the patient described, of cardiac tamponade. The postmortem examination revealed the entire stomach in the chest.

This case emphasises that the delay in presentation can be many years after what seems to be a trivial injury, rather than just the two to three weeks described by George Ninan and Prem Puri.

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1 Ninan G, Puri P. Late presentation of traumatic rupture of the diaphragm in a child. *BMJ* 1993;306:643-4. (6 March.)

Interventional genetics and cancer treatment

EDITOR,—Nicholas R Lemoine and Karol Sikora's optimistic editorial on the treatment of cancer ignores two well established facts about cancer.¹ The first is that it is common for human cancer cells to show pronounced variability in phenotype; thus, to choose but two examples, at an immuno-histochemical level carcinoembryonic antigen is variably expressed in the cells of a carcinoma of the colon; in prostatic carcinoma some cells with endocrine differentiation may be present and a proportion of both endocrine and non-endocrine cells lack prostate specific antigen.² It may therefore prove impossible to find a suitable gene that is universally expressed in all the cells of a cancer.

More important is the difficulty in delivering therapeutic agents to cells in the centre of tumour masses, which except in microscopic lesions can be shown to be inaccessible to monoclonal antibodies and their $F(ab)_2$ fragments' and are known to be hypoxic. It seems unlikely that they will be accessible to a virus on transient exposure.

The final statement in the editorial perhaps puts the prospects in perspective: if gene therapy can be expected to be offered only along with chemotherapy and radiotherapy it will presumably be almost as ineffective in curing most common tumours.

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- J Pervez S, Epenetos AA, Mooi WJ, Evans DJ, Rowlinson G, Dhokia B, et al. Localisation of monoclonal antibody AUA1 and its F(ab)₂ fragments in human tumour xenografts: an autoradiographic and immunohistochemical study. Int J Cancer 1988;suppl 3:23-9.

Protecting the population in occupied areas of Croatia

EDITOR,—Many refugees from former Yugoslavia have found shelter in Croatia (report of UN High Commission for Refugees, 23 November 1992).¹² The severity of the refugee situation has overshadowed a potentially even more tragic problem: the state of the population who remained in their homes in the territories occupied by Serbian forces, now under UN protection. A large proportion of the non-Serbian population stayed in the occupied regions (table). Presently, of 257912

Population in occupied areas of Croatia (now UN protected areas) before and after beginning of war. Figures are numbers (percentages)

	Before war	Displaced people and refugees*	People not accounted for*†
Croatians	219 990 (36.8)	104 612 (47.6)	89 271 (40.6)
Serbs	301 420 (50.4)	3224 (1.1)	288 142 (95.6)
Other	76 200 (12-8)	5173 (6-8)	52 851 (69-4)
Total	597 610	113 009 (18.9)	430 264 (72.0)

*Percentages were calculated for each national group, not for total number of displaced people or people not accounted for. †Population not registered as displaced people in Croatia; does not include those registered as dead and those who were able to return to their homes in west UN protected area.

registered displaced people in Croatia, 113009 come from the four UN protected areas. According to the 1981 census, this leaves 142122 people of non-Serbian nationalities unregistered. Some are probably staying with relatives in Croatia and abroad, but these represent at most a fifth of those who are unaccounted for. The Serbian population mainly stayed in the occupied region, and only $1\cdot1\%$ were recorded as displaced people in Croatia. They are presumed to be in a better position than the non-Serbian population, although they are also maltreated and some of them have been executed (UN secretary general's report, 28 September 1992).

We would like to call the attention of the international humanitarian institutions to the problem of the people in UN protected areas. Their living conditions and health have not been surveyed. The situation in eastern Slavonia is particularly grave. The office of the International Committee of the Red Cross covering the east UN protected area is located in Belgrade and has not visited the occupied region for the past four months. The UN High Commission for Refugees has a representative in Erdut, who has visited only a few of the 132 occupied villages and was not allowed communication with the civilians. It is