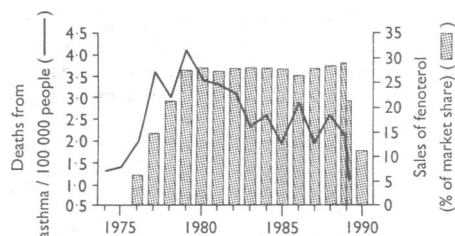


Asthma deaths in New Zealand

SIR,—Ten years ago a member of our group was a coauthor of a paper alerting readers of the *BMJ* to a new epidemic of deaths from asthma in New Zealand.¹ More recently we hypothesised that inhaled fenoterol may have had a role in the epidemic² similar to that of isoprenaline forte in the epidemics in the 1960s.³ Three case-control studies found that inhaled fenoterol was associated with deaths from asthma,^{2,4,5} and these findings have now been confirmed by a similar study in Saskatchewan.⁶ There is also experimental evidence that the adverse effects of fenoterol are greater than those of other commonly used β agonists.^{7,8}

When our first study was published in mid-1989² New Zealand's Department of Health issued a warning that fenoterol should not be used by patients with severe asthma, and sales of the drug began to fall (figure). The provisional mortality



Sales of fenoterol as market share of inhaled doses of β agonists (excluding nebulised presentations) and annual mortality from asthma per 100 000 people aged 5-34 in New Zealand, 1974-89

data for 1989 are now available from the Department of Health. These show that mortality in the 5-34 year age group in New Zealand was the highest in the world during 1983-8 and remained relatively high in the first half of 1989, at 2.2/100 000. In the second half of 1989 the mortality fell significantly ($p=0.04$) to 1.1/100 000 (figure). Preliminary estimates for the first half of 1990 (90% complete) indicate that mortality remains relatively low, at approximately 1.0/100 000.

These findings should be interpreted cautiously because time trend data can be affected by many factors. Nevertheless, the epidemic began when fenoterol was introduced in 1976 and seems to have waned rapidly after warnings about the hazards of fenoterol in mid-1989. This pattern is almost identical with that after warnings about isoprenaline in the 1960s.⁷

On the other hand, the time trend data are inconsistent with the hypothesis that the epidemic may have been due to a class effect of β agonists. The switch to regular use of β agonists (and the sharp rise in sales) occurred in 1979, whereas the epidemic started in 1976.⁹ Total sales of β agonists increased slightly during 1988-90, and publicity about the regular use of β agonists began only in December 1990.¹⁰ Thus the trend in mortality over time is consistent with a major role of fenoterol but is inconsistent with a major role of a class effect of β agonists in the second New Zealand epidemic.

JULIAN CRANE CARL BURGESS
NEIL PEARCE RICHARD BEASLEY

Department of Medicine,
Wellington School of Medicine,
Wellington, New Zealand

RODNEY JACKSON

Department of Community Health,
Auckland Medical School,
Auckland, New Zealand

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Public health heresy

SIR,—Paula Whitty and Ian Jones chronicle succinctly the potentially disastrous binding of public health into the NHS purchasing process.¹ Their argument is oversimplistic. The mandate of directors of public health after the Acheson report—to identify the health needs of the population and to recommend ways in which these could be met—was never thought to exclude curative, reparative, or supportive ways of improving the population's wellbeing. Health promotion services can be purchased like any other. Public health has never competed well for resources with the clinical disciplines, and purchasing has made this neither better nor worse. It has, however, provided the means, through provider contracts, of getting clinicians to help prevent disease—a substantial advance.

Whitty and Jones are right to point out probable conflicts of interest as directors of public health in particular have become corralled into the corporate processes. Nothing better illustrates this conflict than the fact that many directors of public health have a role in the rationing of options of general practitioners and their patients inherent in extra-contractual referrals.

The authors are right, too, to point out the danger of directors of public health becoming too involved in administering the clinical services. In practice, the current danger is that the directors will be exhausted by the floods of information, central government diktats, special interest pleadings, reports, and recommendations with which she or he is expected to deal. Public health is partly to blame for having extolled what in 1985 I termed administrative and economic epidemiology.² Having become aware at about that time of the seeming rising tide of communications that at least had to be read, I began periodically to audit written material coming to a director of public health. I excluded from my count the vast bulk of material, including all journals, books, bulletins, courses, conferences, annual reports, health data, minutes

of meetings, staff memos, budgets, expenses forms, advertising, drug company material, and my own letters. Latterly, for the sake of making a proper comparison, I also excluded correspondence about extracontractual referrals.

In 1985 during a typical month I was expected to deal with 1339 full page equivalents of communications. By 1988 this had risen to 1411. This year, in what seemed a suspiciously quiet pre-election month, the count of mandatory reading reached 1594 pages. This period also saw a profound change in the nature of the material itself. In 1985 and still in 1988 much of the original correspondence originated from members of the public. This year the obligatory reading originated almost entirely in the NHS hierarchy itself. This seems to me to say a lot about where public health has now arrived.

DEREK ROBINSON

Liverpool L18 6JD

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SIR,—Paula Whitty and Ian Jones clearly and accurately point out that the root causes of ill health are problems such as poverty and unemployment.¹ I take issue, however, with their uncharitable attack on public health physicians and their purchasing role. They are obviously unaware of the issues that presently confront public health physicians in their endeavours to improve the health of the population.

Ever since public health physicians started to ply their craft in the mid-nineteenth century they have been well aware of the often politically sensitive nature of their activities and have known that they have to achieve their objectives by whatever means are appropriate within the prevailing context of practice.

The present context is the purchaser-provider separation. Within this framework, to achieve their ultimate goal—improving the population's health—public health physicians have identified the key organisational roles that they need to fulfil both within the purchaser and the provider domains as well as across health service boundaries.

Establishing a credible profile within the purchasing framework and working closely with managerial colleagues have enabled public health physicians to identify the prime issues in ensuring that money is spent to the best advantage for the population.

This may not immediately or dramatically change health status but does help to build up the networks and the support mechanisms that permit public health physicians to influence and persuade at a broader level. Some of the key skills that are incorporated in training in public health medicine are those entitled "political"—knowing when and how to intervene and when to refrain, understanding organisations and the power bases within them, and understanding and managing vested interests.

Poverty and unemployment are outside the direct aegis of public health physicians, but enabling politicians to understand what the results of their actions may be and helping health service colleagues and consumers to understand and to act on health information are well within the