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## Japan lagging in influenza jabs

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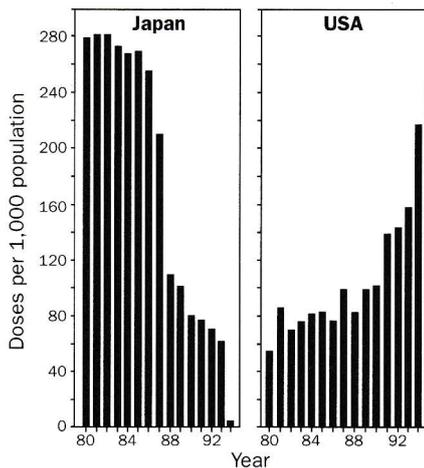
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SIR — Influenza epidemics have high costs in morbidity, mortality and medical care. Vaccination of high-risk groups, such as the elderly or those with chronic illness, is the most effective measure for reducing the impact of the disease<sup>1</sup>. In the United States, the number of influenza immunizations has more than doubled in the past 10 years, and in 1994 coverage reached approximately 60% among people aged 65 and over<sup>2,3</sup>. Furthermore, the number of doses of vaccine distributed per 1,000 population more than doubled between 1990 and 1994 alone, as shown in the figure. The trend is similar to that seen in other developed countries, although several-fold differences are still seen in per capita vaccine distribution<sup>4</sup>. In contrast, influenza vaccine distrib-



Influenza vaccine distribution in Japan and the United States, 1980–94, expressed as the number of doses distributed per 1,000 population. Japan's figure in 1994 is shown as the doses produced per 1,000 population, because accurate information on vaccine distribution is not available for that year.

ution in Japan has shown a marked decrease over the same period.

Influenza appeared on the list of targeted diseases in Japan from 1976 until June 1994. This policy was intended to control influenza epidemics in the entire community through suppressing transmission in schools<sup>5</sup>. Although the vaccination rate among schoolchildren was about 80% up to the early 1980s, it showed a steep decline thereafter, to 18% in 1992. This decline was due to poorly designed studies that alleged that the vaccine had little if any efficacy. These reports create scepticism about vaccination, not only among the general public but also among many medical professionals<sup>6</sup>.

Influenza is considered a minor illness in Japan. There is no national recommendation of target groups for active immunization, nor any system for reimbursement. In this rapidly ageing society, very few older people volunteer for inoculation, and when

they do they must pay approximately US\$50 to be vaccinated. Furthermore, Japanese pharmaceutical companies are decreasing or discontinuing their production of influenza vaccine. This contrasts strikingly with the United States where, since 1993, the federal government's Medicare programme has provided reimbursement for the cost of influenza vaccine and its administration<sup>2</sup>, and where the manufacturers have greatly expanded their production.

Many countries are developing comprehensive strategies to cope with the next influenza pandemic. Given recent experience, it seems unlikely that attitudes towards influenza and influenza vaccination in Japan will change in the near future. As a result, Japan may be ill prepared to join other countries in international efforts to confront the next pandemic.

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