Notes

1. For discussion of influenza types see the Technical Afterword.
4. Some weeks later some of them anonymously contributed their privately-held numerical probabilities to an academic study that applied a particular analytic technique, the so-called “Delphi” method, to the swine flu decision. Other experts also contributed numbers anonymously. See Stephen Schoenbaum, Barbara McNeil, and Joel Kavet, “The Swine Influenza Decision,” *New England Journal of Medicine* Vol. 295, pp. 759–765, 1976.
7. Here and elsewhere we cite CBS coverage rather than that of NBC or ABC, where all reported the same happening, because only CBS retains transcripts of news stories as telecast or broadcast.
8. Officials of the Health Ministry in Ottawa told us that they had served as a “procurement agent” for the Provinces. As such they tried and failed to get vaccine from U.S. manufacturers; Washington took too long to release it for their use. They contracted eventually with firms in Britain, Germany, Australia and the Netherlands. (These new and multiple suppliers created special testing problems.) Obtaining vaccine only in October, the Canadians suspended shots when we did and like us still have abundant supplies of unused vaccine.
12. Letter from John J. Horan, President, Merck and Company (parent of Merck, Sharp and Dohme, the vaccine manufacturer), to Secretary Mathews, HEW, April 13, 1976. Comparable letters went to seven senators, four congressmen, two members of the White House staff and three
of Mathews' associates. The full paragraph in Horan's letter reporting what he had been told by his primary insurer (Federal Insurance Co., Chubb Corporation group) is as follows:

Our own insurance carrier has just told us that it is willing to insure us only against negligence or fault on our part. Moreover, because of the massive number of people involved, the carrier considers it not feasible to place any broader coverage in the existing world insurance markets at virtually any price. Thus, the carrier is willing to provide us with protection only against claims arising from our own negligence or failure to manufacture in accordance with government specifications, i.e., against those risks which are clearly our responsibility.

15. Ibid., July 20, 1976, p. 208.
17. Ibid., Vol. 12, No. 32, August 6, 1976, p. 1249.
19. The President made this comment September 2 to his Press Secretary who released it to the UPI wire service where it appeared. It was quoted by Marilyn Berger on NBC News that night.
22. Ibid.
23. Vanderbilt Television News Archives Index and Abstracts, NBC Evening News, October 13, 1976. The scientist quoted is J. Anthony Morris, who had been discharged in July, 1976 from BoB after a long proceeding involving his performance of research there. From then on he maintained that he had been fired in retaliation for his criticism of influenza vaccines and immunizations, up to and including swine flu. FDA officials vehemently deny the charge. The Civil Service Commission has since upheld their action. Morris continues his warnings.
26. Figures are taken from unpublished data compiled by the CDC. Percentages are based on populations 18 years of age and older, as of the 1970 census. This means that for 1976, percentages are overstated in areas of recent, rapid growth.


34. The trivalent vaccine recommended for use during the winter of 1978-79 was to include first, vaccine against Russian flu; second, vaccine against Victoria or Texas flu, and third, vaccine against the prevailing strain of mild, type-B virus. For discussions of nomenclature see the Technical Afterword.

35. See note 4.

36. In 1976 Carballo was human resources Secretary in the State of Wisconsin; Goldmark, who had held a comparable post in Massachusetts, was Director of the New York State Budget; Stevens was Goldmark’s successor in Massachusetts as Secretary for Human Resources.

37. In the course of this study we screened tapes and read summaries of all relevant evening news shows on all three networks from February 1976 through March 1977. Tapes and summaries were made available by Vanderbilt University. We also read applicable transcripts of all CBS News coverage, evening, morning and radio. These came to us courtesy of CBS News. For press and magazine coverage we used clippings compiled contemporaneously for CDC. We subsequently interviewed reporters and others in both types of media.

Another view of coverage in the media is offered by David M. Rubin, “Remember Swine-flu?” Columbia Journalism Review, July/August 1977. Surveying samples of TV and press coverage for the week of excitement over temporally-related deaths in Pittsburgh (October 11-17, 1976), Professor Rubin finds reporting generally “… neither sensational nor inaccurate. On the contrary it faithfully reflected the confusion among public officials. …” This squares with our impression throughout the 13 months. Rubin is concerned for the profession of journalism. (He trains journalists at NYU.) He wishes his professionals had done much better than they did. We who train public servants feel we have to take the journalism “as is.” For what it is worth, we think the swine flu coverage rather better than average. Our concern is with that confusion among officials.

Rubin has also put his findings before doctors with suggestions to

38. For that matter, why stop with Federal programs? Deciding proper boundaries for a competition raises issues about Federal-state and public-private roles. This is one reason why such boundaries don't get set. Consider, for example, pneumococcal pneumonia, a frequent cause of death for aged persons and for others at high risk, including persons—many of them children—whose spleens have been removed after an accident. A newly marketed vaccine reliably prevents infection from the 14 common subtypes of the pneumococcus. These account for 80 percent of this pneumonia. The preventive is apparently both safe and lasting. It could prolong thousands of lives each year. The disease is not highly communicable, but it is far more serious for most of those who get it than is influenza. Does this argue for a Federal initiative? If so, at the expense of the flu program? We pose these questions not to answer them but to suggest the range of readily conceivable budgetary trade-offs. As this shows, however, a competitive arena is not easily established. In the case of influenza, none yet exists.


46. These are published as a series by the National Center for Health Statistics. See, for example, “Current Estimates from the Health Interview Survey, United States—1974,” Vital and Health Statistics, Series 10—No. 100, DHEW Publication No. (HRA) 76-1527. September, 1975.


49. This designation indicates a Type A influenza virus first isolated from man in New Jersey in 1976. It contains Hsw1 hemagglutinin (first identified in virus isolated from swine) and N1 neuraminidase.


53. Epidemic influenza has a predilection for winter yet most pandemics have begun outside the winter months. *Ibid.*, p. 46.


60. The 1950 virus was a further minor drift; it now has reappeared as Russian flu.


