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INFLUENZA AND PNEUMOCOCCAL VACCINATION COVERAGE LEVELS

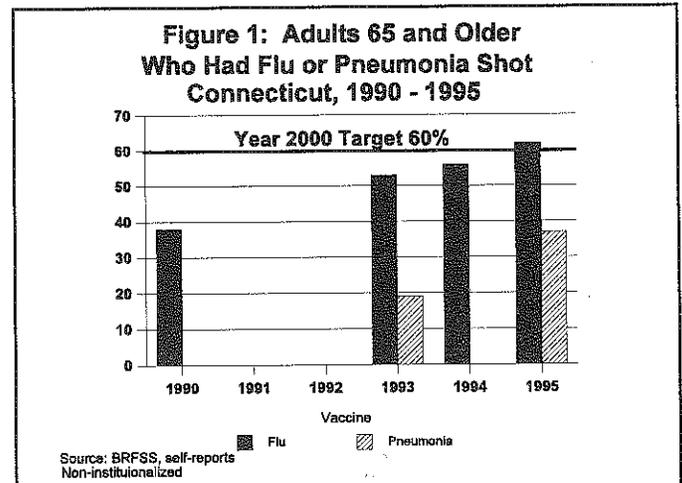
Recommendations to provide annual influenza vaccination and one dose of pneumococcal vaccine to all persons aged 65 years or older (1,2) are intended to reduce the high morbidity and mortality associated with influenza and pneumococcal disease (3,4). One of the national health objectives for the year 2000 is to increase influenza and pneumococcal vaccination levels to at least 60% for persons at high risk for influenza and pneumococcal disease, including those aged 65 years or older (objective 20.11)(5).

This report summarizes estimates of influenza vaccination coverage levels among persons aged 65 years or older for 1990, and 1993-1995; and pneumococcal vaccination coverage levels for 1993 and 1995 based on data from the Behavioral Risk Factor Surveillance System (BRFSS)(4). In Connecticut, the survey is coordinated by the Department of Public Health and conducted by a contractor who interviews 150 randomly selected, non-institutionalized adults aged 18 years or older each month.

In 1990 and 1993-1995, all respondents were asked if they had received a flu shot in the past 12 months. In 1993 and 1995, respondents were also asked if they ever had a pneumonia vaccination.

Results are reported only for those aged 65 and older, who constitute the largest segment of the high-risk population (Figure 1). In 1995, 62% of respondents reported getting a flu shot in the past year. This was an improvement over the 56% rate reported in 1994 and exceeded the objective of 60%.

In 1995, 37% of respondents reported they had received a pneumonia vaccination. This was a marked improvement over the 19% rate reported in 1993, although still far below the objective of 60%.



Editorial Note: The Connecticut BRFSS findings are similar to national figures reported by the Centers for Disease Control and Prevention (CDC) (3,4). Self-reported pneumococcal and influenza vaccination levels among persons ≥ 65 years of age have steadily increased since 1989 based on estimates from several sources (3,6,7, CDC, unpublished data 1996). Prior to 1989, the United States Immunization Survey (USIS) provided national estimates of vaccine coverage. USIS data showed overall influenza vaccination levels ranging from 22% to 30% during 1973-1985, and pneumococcal vaccination levels of 9.8% and 10.7% during 1984

and 1985, respectively. Data from the National Health Interview Survey (NHIS), a multistage cluster survey of U.S. civilian households, document overall self-reported influenza vaccination rates in persons ≥ 65 years of age increased from 33.0% in 1989 to 52% in 1993, and pneumococcal vaccination from 15% to 28% (3).

BRFSS surveys have also shown an increase, with a 32% influenza vaccination level reported in 1987, and 50% in 1993 as reported above (3,7). Data on net doses of influenza vaccine distributed are consistent with this upward trend in vaccination levels, increasing from 24 million doses of influenza vaccine distributed in 1989 to 40.9 million doses in 1993. That these point estimates of vaccination levels and trends from different sources are similar gives added credence to improving coverage. Preliminary estimates from the 1994 NHIS show overall influenza and pneumococcal vaccination levels for persons ≥ 65 years of age to be 55% and 30%, respectively (CDC, unpublished data 1996).

Reasons suggested for the rise in influenza vaccination levels include 1) greater acceptance of preventive medical services by practitioners, 2) increased delivery and administration of vaccine by health-care providers and sources other than physicians (e.g., visiting nurse and home health agencies), and 3) the initiation of Medicare reimbursement for influenza vaccination in 1993 (3).

Both in Connecticut and nationally, pneumococcal vaccination levels have increased over time, but remain substantially lower than coverage achieved for influenza vaccine. Nationally, distribution of pneumococcal vaccine increased from 1.2 million doses in 1989 to 3.6 million doses in 1993, consistent with increasing self-reported vaccination levels. The lower rate of coverage may result because many providers and patients may not be routinely reminded about the need for pneumococcal vaccination among persons aged ≥ 65 years, while campaigns for influenza vaccination occur annually before the influenza season. Thus, there is a need to educate providers and the public about the benefits of pneumococcal vaccination and current recommendations.

The influenza vaccination rate reported in the 1995 BRFSS for Connecticut is the highest reported for older persons to date. The pneumococcal

vaccination rate still falls far short of the 60% Healthy People 2000 objective in high risk populations (5). Achieving this objective will require continuing collaboration among public and private organizations to improve awareness and vaccine delivery; changes in clinical practice; vaccine delivery mechanisms that limit cost and remove accessibility constraints; and surveillance data, such as those provided by the BRFSS, to assess the progress of current and future programs.

[Adapted from MMWR 1996;45:853-9]

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INFLUENZA TESTING

Isolation and identification of influenza virus is an important part of Connecticut's influenza surveillance system. The Connecticut Department of Public Health encourages physicians to submit throat swabs for virus isolation to the Department's Virology Laboratory from patients with a typical influenza syndrome (abrupt onset of fever, myalgia, and cough). Specimens should be collected no later than 3 days after onset of symptoms and sent immediately to the Virology Laboratory, on wet ice if possible.

Throat swab kits (VRCs) may be obtained from the State Laboratory (860-566-2824). Throat swabs submitted by a health care provider for influenza will be exempt from fees effective November 1, 1996 through January 31, 1997. To be eligible for the fee exemption, the health care provider must specify "FLU STUDY" in Section #1 of the Virology request form. All requested information on the form should be provided as well. For questions on specimen collection and submission, call the Virology Laboratory in Hartford at (860) 566-4776.

THE PUBLIC HEALTH RESPONSE TO THE RABIES EPIZOOTIC BY LOCAL HEALTH DEPARTMENTS

The epizootic of the Atlantic strain of rabies virus among raccoons has spread from Florida to Maine (1). In Connecticut, the first rabid raccoon associated with the epizootic was identified in March 1991. By March 1995, rabid animals were confirmed in every town. The spread of rabies among terrestrial animals in Connecticut created a need for local health departments to develop a policy to coordinate town efforts to prevent human and domestic animal rabies cases. In June 1995, the Department of Public Health mailed a questionnaire to all local directors of health in Connecticut regarding their department's response to the rabies threat. Follow-up phone calls were made to non-respondents. Health departments representing 168 of Connecticut's 169 towns and cities responded to the questionnaire, which included questions concerning the types and availability of services necessary to respond to rabies incidents.

Health departments that provide services for 80% of Connecticut's towns, and 93% of the state's population had established protocols to respond to human or domestic animal rabies exposures. Written protocols were available in 44% of these towns. Seventy percent of the protocols included a phone list of persons to contact when a rabies incident occurs. Of the responding towns, 97% had personnel available to answer public calls concerning rabies, and 82% had personnel available to arrange transportation of potentially rabid animals for testing (Table 1).

Of the estimated 720 rabies-related calls that local health departments received each month approximately 51% required further investigation. The most frequent inquiry (59%) involved people or domestic animals potentially exposed to rabid wild animals. When the health department was not available to consult on rabies issues, citizens were most often referred to the Animal Control Officer (ACO). In 91% of Connecticut towns, an ACO was available 24 hours a day to respond to a potential human or domestic animal rabies exposure including the quarantine of domestic animals. Animal Control Officers also responded to calls regarding wild animals in situations not involving human or domestic animal exposures in 70% of towns.

Eighty-one percent of Connecticut's population live in towns (103 towns) that have full-time health directors. Seventy one of these towns are organized into health districts and share resources including personnel. Health departments with full-time directors more frequently reported providing assistance in circumstances when rabies exposures occurred than those with part-time directors. Ninety-three percent of the 103 towns with full-time, and 65% of the 65 towns with part-time health directors had established a rabies response protocol (Table 2).

Rabies is enzootic among raccoons in Connecticut and poses an ongoing threat to people and domestic animals. It continues to be important to maintain and improve rabies related prevention activities. Responding to the various potential rabies related circumstances places demands on local resources. When a health department cannot intervene in a rabies related incident, confusion and concern can be minimized if alternative instructions are provided. Distribution of a list of phone numbers of agencies that can provide rabies information to people concerned about a possible exposure or the presence of a potentially rabid animal would help assure that appropriate actions are taken.

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Table 1: Availability of local authorities to respond to a rabies incident by percentage of towns and population served, Connecticut, 1995

	Towns (%) (n = 168*)	Combined Population (%) (n = 3,281,137**)
Health Department		
Answer rabies questions	97	99
Post exposure treatment evaluation	94	94
Animal testing evaluation	90	90
Established protocol	80	93
Transportation of specimens	82	83
After hours arrangements	76	85
Animal Control Officers		
Wildlife exposures - domestic animals	99	99
Investigation of bites by domestic animals	98	99
Quarantine of domestic animals	98	98
24 hour availability	91	90
Capture sick wildlife - non-exposures	70	76

* Total number of towns in Connecticut = 169

** Total Connecticut population = 3,287,116

Table 2: Availability of health departments to respond to a rabies incident by percentage of health departments with full-time or part-time directors of health, Connecticut, 1995

	Full-time (%) (n = 103*)	Part-time (%) (n = 65**)
Answer rabies questions	100	92♦
Post exposure treatment evaluation	98	88♦
Animal testing evaluation	95	83♦
Transportation of specimens	93	65♦
Established protocol	90	65♦
After hours arrangements	85	62♦

* Total number of towns with full-time health directors in Connecticut = 103

** Total number of towns with part-time health directors in Connecticut = 66

♦ p ≤ .05

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