Infections due to *Streptococcus pneumoniae* (pneumococcus) bacteria and influenza viruses are a major cause of illness, hospitalization and death in our society. The burden of these diseases falls most heavily on the elderly and those with chronic medical conditions. In Utah in 1999, 343 of 380 deaths from influenza and pneumonia were among persons ages 65 and older. There were a total of 7,772 hospitalizations for these illnesses with total hospital charges of $69 million.

Adult immunization is a preventive clinical service with a potentially large impact on the health of people in Utah. The ongoing Utah Behavioral Risk Factor Surveillance System (BRFSS) provides an opportunity to estimate directly the extent to which non-institutionalized adults in Utah are currently being vaccinated against influenza and pneumococcal disease.

- In 1999, 57% of Utah adults ages 65 and older reported having both an influenza vaccination in the past year and a pneumococcal vaccination ever. However, 21% of older adults had neither immunization (Figure 1).

- The good news is that the percentage of older Utahns who reported having an influenza vaccination in the past year and those who reported having a pneumococcal vaccination ever has increased steadily and significantly since 1993. These percentages are higher in Utah than in the U.S. as a whole (Figure 2).

The Utah Department of Health’s Immunization Program promotes adult immunization in a number of ways. They have developed an immunization schedule card in order to help adults know what shots they need. Also, a UTA ‘influenza bus’ is making its way through the streets of Salt Lake City with the message “Don’t Hesitate, Vaccinate” to promote influenza vaccination. For copies of the immunization schedule or more information, contact the Utah Department of Health’s Immunization hotline: 1-800-275-0659.
Influenza, commonly called "the flu," is an infection of the respiratory tract caused by the influenza virus. Compared with most other viral respiratory infections, such as the common cold, influenza infection often causes a more severe illness. Utah's flu season typically runs from December through March with the peak occurring in early February.

Most people who get the flu recover completely in 1 to 2 weeks, but the elderly and people with chronic health problems are much more likely to develop serious complications. In an average year, influenza is associated with more than 20,000 deaths and more than 100,000 hospitalizations nationwide.

- In Utah, the percentage of adults age 18 and older who reported having an influenza vaccination in the past year was about the same for both men and women, but increased greatly with age (Figure 3).

- For Utah adults ages 65 and older, the percentage who reported an influenza vaccination in the past year varied among Utah's local health districts from 58% in Central Health District to 81% in Bear River Health District (Figure 4).

- Utah adults ages 65 and older who were White, non-Hispanic were more likely than those who were Hispanic or non-White, non-Hispanic to report having an influenza vaccination in the past 12 months (Figure 5).

The Centers for Disease Control and Prevention (CDC) recommends annual influenza vaccination for anyone who is age 50 or older, people in long-term care facilities, anyone with certain chronic health conditions, such as diabetes or asthma (including children), pregnant women, health-care workers and any household contact of people at high risk. The Utah Department of Health is recommending that Olympic volunteers and workers also receive the vaccine.
In the United States, pneumonia is still a major cause of mortality. The common bacterium, Streptococcus pneumoniae, is the leading cause of community-acquired pneumonia. Of several pneumococcal diseases, pneumonia is the most common clinical illness caused by this bacterium among adults. It is also a common bacterial complication of influenza and measles viruses.

Nationally, pneumococcal pneumonia alone has been estimated to cost up to $18 billion and cause up to 40,000 deaths per year. Approximately half of all deaths from pneumococcal disease in the United States could be prevented by use of the vaccine. The urgency of focusing on preventive measures for these diseases is heightened by the increasing incidence of drug-resistant infections.

- Utah adults ages 65 and older were much more likely to report ever having a pneumococcal vaccination than all other age groups (Figure 6).

- The percentage of Utahns ages 65 and older who reported ever having a pneumococcal vaccination varied among Utah’s 12 health districts from 37% in Wasatch County to 68% in Utah County (Figure 7).

The CDC recommends pneumococcal vaccination for people age 65 and older, anyone with chronic health problems or low resistance to infection (including children), those in long-term care facilities and people who are Alaska Natives or members of certain Native American populations. The Utah Department of Health recommends that high-risk individuals also receive the pneumococcal vaccine because pneumonia is a major complication resulting from influenza. Pneumococcal vaccine can be given year round and is usually given just once in a lifetime.

REFERENCES:
Prevention of Pneumococcal Disease: Recommendations of the Advisory Committee on Immunization Practices (ACIP), MMWR 46(RR-08);1-24, Publication date: 04/04/1997

In 2000, Utah’s Adult Immunization Program received an award from the U.S. Centers for Disease Control and Prevention (CDC) for being the state with the 2nd highest influenza vaccination rate of 75% for adults ages 65 and older based on 1999 BRFSS data. The Healthy People 2010 goal is to increase the proportion of non-institutionalized adults aged 65 years and older who are vaccinated annually against influenza and ever vaccinated against pneumococcal disease to 90%.
The Utah Behavioral Risk Factor Surveillance System (BRFSS) is an ongoing effort by the Utah Department of Health in conjunction with the U.S. Centers for Disease Control and Prevention (CDC) to assess the prevalence of and trends in health-related behaviors in the non-institutionalized Utah adult population aged 18 years and older. The survey is supported in part by funds from Cooperative Agreement No. U58/CCU800572 from the CDC. Data are collected monthly from a random telephone sample of adults living in households with telephones. Utah has participated in the BRFSS continuously since 1984.

The BRFSS questionnaire is modified each year by the CDC in collaboration with participating state agencies. The questionnaire has three parts. The first part is a core set of questions that is asked by all states. The second part consists of a series of topical modules developed by the CDC. States have the option of adding modules as they wish. Utah has used several of the CDC modules. The final part of the questionnaire consists of questions designed and administered by individual states to address issues of local concern. These have been revised annually in Utah to maximize the survey’s ability to address the needs of Utah’s health programs.

Participants in the Utah BRFSS are asked about a wide variety of behaviors such as seat belt use, exercise, tobacco and alcohol consumption, health services utilization and basic demographic information. Participation in the BRFSS is completely anonymous and voluntary. Prior to analysis, BRFSS data are weighted so that the findings can be generalized to the Utah adult population. The Utah Department of Health would like to thank the citizens of Utah who have participated in this survey.

For more information about the Utah BRFSS, contact the Utah BRFSS Coordinator at the Utah Department of Health at (801) 538-6434.