

Determining County-level Impact of Pandemic Influenza

FluAid 2.0 is free software available online at the National Vaccine Program office to assist county officials with estimates of health burdens during an influenza pandemic (<http://www2a.cdc.gov/od/fluaid/>)

Local health officials can use this software to:

- calculate hospitalizations, deaths and outpatient visits for their county or region
- estimate the impact of a pandemic on a healthcare system

The online tool already provides estimates for North Carolina based on numbers from the United States Bureau of the Census, 1999; however, county-specific data can be entered into the online calculator. County-specific data can be obtained from the NC State Demographics website, available at http://demog.state.nc.us/frame_start.html.

Eighteen and nineteen year olds are grouped together at the NC State Demographics website. Therefore, when entering numbers of people by age category into the FluAid online calculator, make the following two adjustments:

- the number of 0-19 year olds should be entered into the FluAid “0-18 years” category
- the number of 20-64 year olds should be entered into the FluAid “19-64 years” category

The following tables will assist local health officials with gathering the required data to use the FluAid software. Data from Tables 1 and 2 are necessary to calculate deaths, hospitalizations and outpatient visits. Data from Table 3 can be used to calculate the impact on health resources.

TABLE 1	
Population by age group for _____ County	
0-19 years	
20-64 years	
65+ years	

TABLE 2		
High-risk percentages by age-group for _____ County*		Default values for North Carolina
0-19 years		6.4%
20-64 years		14.4%
65+ years		40%

*High-risk percentages may vary from the state or national estimates.

TABLE 3	
_____ County	
Maximum number of hospital beds available for one week stay for influenza	
Maximum number of providers available to see influenza outpatients per week during the span of a pandemic	
Maximum morgue capacity (maximum number of deceased per week)	
Assumption: number of weeks of pandemic activity (estimated 6-8 weeks)	
Assumption: maximum number of patients per provider per day (6-day week)	
Assumption: average length of hospital stay for influenza-related illness (weeks)	