

CDC FluView

Pneumonia and Influenza Mortality Surveillance Data from the National Center for Health Statistics Mortality Surveillance System

Application Quick Reference Guide – October 2016

Introduction

This Quick Reference Guide is intended to provide an overview of pneumonia and influenza mortality surveillance data from the National Center for Health Statistics Mortality Surveillance system and explain the available features of the “Pneumonia and Influenza Mortality Surveillance” web application.

This application is part of the CDC FluView report, which provides weekly influenza surveillance information in the United States. This application was developed to improve communication about influenza with the public health community, clinicians, scientists, and the general public. This application is added to the series of dynamic visualizations that allow Internet users to access influenza information collected by CDC’s monitoring systems. CDC’s FluView report is available at <http://www.cdc.gov/flu/weekly/>

About the Data

National Center for Health Statistics Mortality Surveillance System-

The National Center for Health Statistics (NCHS) collects and disseminates the Nation's official vital statistics. NCHS collects death certificate data from state vital statistics offices for virtually all deaths occurring in the United States. Pneumonia and influenza (P&I) deaths are identified based on ICD-10 multiple cause of death codes.

NCHS Mortality Surveillance System data are presented by the week the death occurred at the national, state, and HHS Region levels. Data on the percentage of deaths due to P&I on a national level are released two weeks after the week of death to allow for collection of enough data to produce a stable percentage. States and HHS regions with less than 20% of the expected total deaths (average number of total deaths reported by week during 2008-2012) will be marked as insufficient data. Collection of complete data is not expected at the time of initial report, and a reliable percentage of deaths due to P&I is not anticipated at the U.S. Department of Health and Human Services region or state level within this two week period. The data for earlier weeks are continually revised and the proportion of deaths due to P&I may increase or decrease as new and updated death certificate data are received by NCHS.

The seasonal baseline of P&I deaths is calculated using a periodic regression model that incorporates a robust regression procedure applied to data from the previous five years. An increase of 1.645 standard deviations above the seasonal baseline of P&I deaths is considered the “epidemic threshold,” i.e., the point at which the observed proportion of deaths attributed to pneumonia or influenza was significantly higher than would be expected at that time of the year in the absence of substantial influenza-related mortality. Baselines and thresholds are calculated at the national and regional level and by age group.

For more information on pneumonia and influenza mortality surveillance please visit:

<http://www.cdc.gov/flu/weekly/overview.htm#Mortality>

* The 10 U.S. Department of Health and Human Services regions include the following jurisdictions.

Region 1: Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont; Region 2: New Jersey, New York, and New York City; Region 3: Delaware, District of Columbia, Maryland, Pennsylvania, Virginia, and West Virginia; Region 4: Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, and Tennessee; Region 5: Illinois, Indiana, Michigan, Minnesota, Ohio,

and Wisconsin; Region 6: Arkansas, Louisiana, New Mexico, Oklahoma, and Texas; Region 7: Iowa, Kansas, Missouri, and Nebraska; Region 8: Colorado, Montana, North Dakota, South Dakota, Utah, and Wyoming; Region 9: Arizona, California, Hawaii, and Nevada; Region 10: Alaska, Idaho, Oregon, and Washington.

Accessing the FluView Web-based Application

All FluView applications are accessible to the public on the Internet. To access the National Age Group Distribution of Influenza Positive Specimens Reported by Public Health Laboratories web application, open a web browser on your computer and go the following link:

<http://gis.cdc.gov/grasp/fluview/mortality.html>

Application requirements:

- ☐ Internet Browser
 - Windows Internet Explorer 7 and later
 - Google Chrome
 - Mozilla Firefox

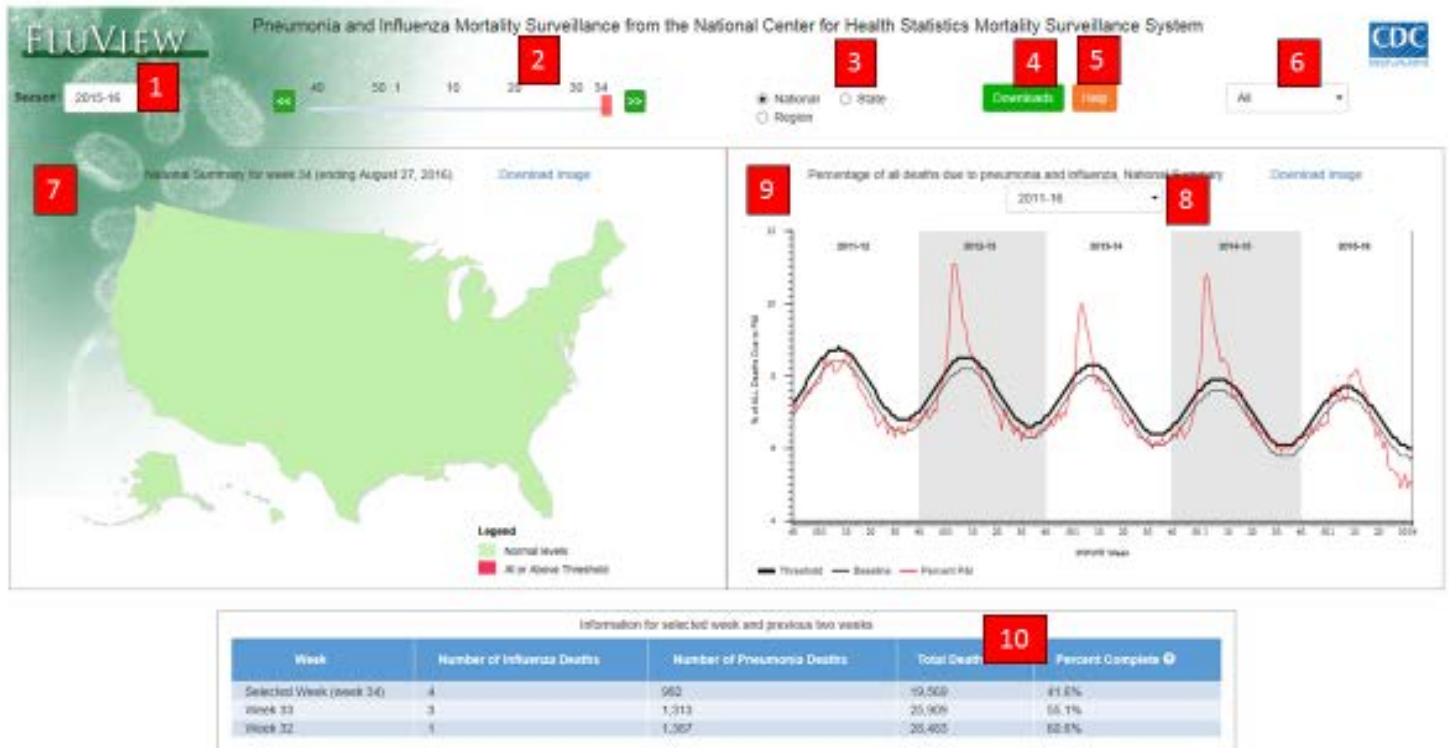
Once the website is loaded, a disclaimer dialog box will appear. Please review the disclaimer for important reference information. Click “Ok” to continue the FluView web application. Clicking on Cancel will take you to the CDC FluView weekly flu report home page

<http://www.cdc.gov/flu/weekly/>

Application Functions and Tool Overview

This interactive tool allows users to display and query information for current and previous flu seasons. A description of tool features are listed below the application image. Below are images of the default

view of the Pneumonia and Influenza Mortality Surveillance from the National Center for Health Statistics Mortality Surveillance System web application.



- 1. Influenza Season Selection Tool** – A drop down menu allows the user to choose which influenza season to display.
- 2. MMWR Week Selection Tool** – A sliding bar allows the user to select which week to view in the map (7) as well as adjusts sliding bar on the figure (8) and selected week in table below (10).
- 3. Geographic Level Selection Tool** – Select National level data, HHS Regional data, or State level data to be displayed.
- 4. Downloads** – Download data as currently displayed or select custom data to be downloaded.
- 5. Help** – The Help Menu provides a detailed overview and describes the full functionality of the FluView Web application.

- 6. Age Group Selection Tool** – Allows the user to select which age groups to display. This function is only active when “National” is selected in the Geographic Level Selection Tool.
- 7. Week Summary Map** – Displays a week’s summary statistics based on Geographic level.
- 8. Influenza Season Range Selection Tool** – A series of check boxes that allow the user to choose which influenza seasons are displayed in the figure with the data on the percentage of all deaths due to pneumonia and influenza (9). A total of five consecutive seasons can be selected at a time, and the season which is selected within the “Influenza Season Selectiontool” (see above) must be selected.
- 9. Percentage of Deaths Due to Pneumonia and Influenza Figure** – Figure displaying the threshold, baseline and percent of deaths due to pneumonia and influenza by MMWR week during the selected influenza seasons and geographic scale.
- 10. Information Table** – Displays the number of influenza and pneumonia deaths separately for the selected and previous two weeks.