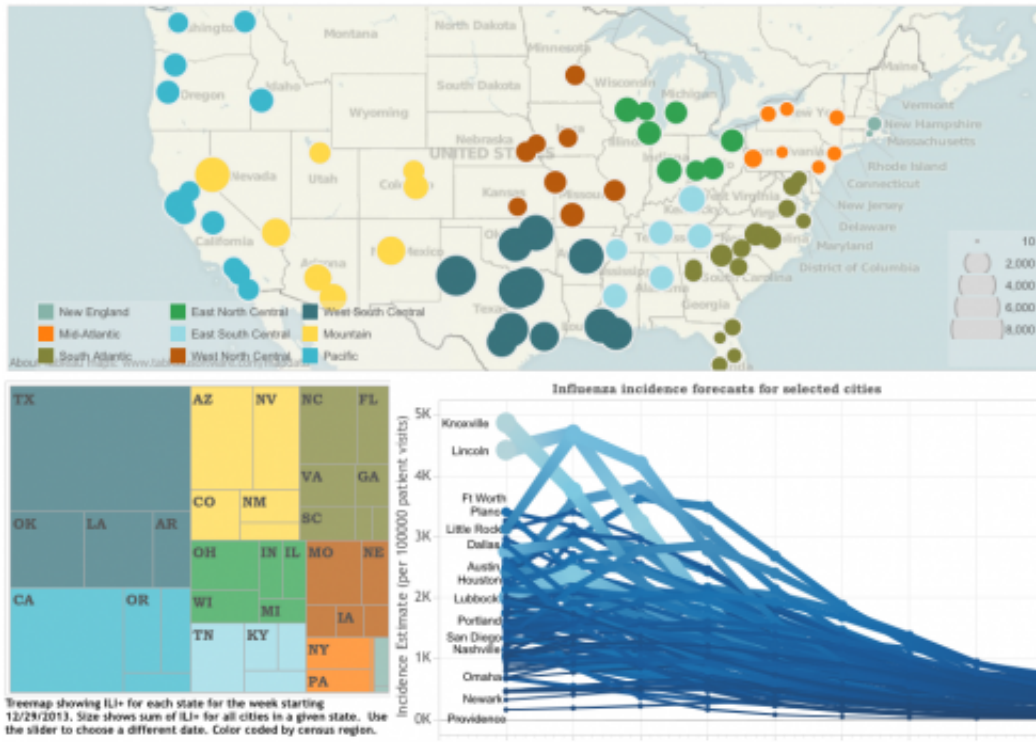# Flu forecasting website posts first predictions

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This is a screenshot of cpid.iri.columbia.edu. Credit: cpid.iri.columbia.edu

Infectious disease experts at Columbia's Mailman School of Public Health have launched a website that reports weekly predictions for rates of season influenza in 94 cities in the United States based on a scientifically validated system.

The URL is cpid.iri.columbia.edu.

Reporting the latest data from the week of December 29, 2013 through January 4, 2014, the website—Columbia Prediction of Infectious Diseases: Influenza Forecasts, or CPID—shows:

- Flu cases in most of the country are forecast to peak in January, including San Francisco (Jan. 5-11), Chicago (Jan. 12-18), Atlanta (Jan. 12-18), Washington, D.C. (Jan. 12-18), and Los Angeles (Jan. 12-18), New York City (Jan. 19-25), and Boston (Jan. 26-Feb. 1)
- Flu cases are predicted to continue to rise into February for several cities, peaking in Miami during the week of Feb. 2-8 and Providence, RI, during Feb. 16-22.
- Areas of the country hardest hit by seasonal flu—including Texas, Tennessee, Louisiana, and Nevada—have already seen the worst of the outbreak.
- Overall, the 2013-2014 flu season is currently predicted to peak later with fewer cases than the 2012-2013 season but considerably more severe than the 2011-2012 season.

New predictions are posted every Friday afternoon during the flu season.

"For the first time, people can see the outlook for seasonal flu in their area by going online," says Jeffrey Shaman, PhD, assistant professor of Environmental Health Sciences at the Mailman School, who led the development of the site and forecasting system. "We hope the site will help foster greater awareness of influenza activity and risk around the country, and motivate individuals to take measures, such as vaccination, to protect themselves against the virus." Dr. Shaman is also affiliated with the International Research Institute for Climate and Society at Columbia's Earth Institute, which is hosting the website.

Website Features

- Interactive map of the United States the displays the relative severity of seasonal flu in cities across the country flu and incidence numbers for each.
- Influenza incidence predictions by city for the coming weeks.
- Map that illustrates the proportion of flu cases by region.
- Charts that compare the timing and severity of the four most recent flu seasons.
- Exportable data for each week of the flu season (beginning in 9/29 for the 2013-2014 season).

The flu forecasting system adapts techniques used in modern weather prediction to turn real-time, Web-based estimates of influenza infection into local forecasts of the future influenza incidence by locality.

For the public, the flu forecast may promote greater vaccination, the exercise of care around people sneezing and coughing, and a better awareness of personal health. For health officials, it could inform decisions on how to stockpile and distribute vaccines and antiviral drugs, and in the case of a virulent outbreak, whether other measures, like closing schools, are necessary.

"Flu forecasting is a powerful example of how public health research is leveraging technology to prevent the spread of infections and safeguard our health," says Linda P. Fried, MD, MPH, Dean of Columbia's Mailman School.

In the U.S. the Centers for Disease Control estimates that between 3,000 and 49,000 die from the flu every year, according to the CDC.

Provided by Columbia University's Mailman School of Public Health