



Forecasting the flu in New Mexico

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Using mathematical approaches to study influenza dynamics from current and past flu seasons, Los Alamos scientists are working to forecast how the flu will affect Northern New Mexico in the coming months.

“We combine mathematical models with historical data on influenza and Wikipedia traffic to forecast the flu season at the national level and [health and human services regions](#),” says Sara Del Valle, a Los Alamos mathematical and computational epidemiologist who is participating in a Centers for Disease Control and Prevention flu forecasting challenge with colleague Dave Osthus. “Our forecasts are updated each week, so as more data becomes available, our forecasts improve and the uncertainty is reduced.”

The Mathematical and Computational Epidemiology Team: Kyle Hickmann, Geoffrey Fairchild, Sara Del Valle, David Osthus, Reid Priedhorsky, and Nicholas Generous (not pictured).

One of the first things people do when they feel sick is search for more information about their symptoms online. These data from social media and online readership of sites such as Wikipedia help scientists forecast disease outbreaks in real time.

Early peaking flu seasons (before mid-January) tend to be more severe than later peaking flu seasons (after mid-January), says Osthus. “At this point in November, it’s hard to say when flu season will peak in New Mexico. There is a lot of uncertainty about the timing of the flu season peak; thus, there is a lot of uncertainty about its severity.”

The [CDC recommends](#) getting vaccinated against the flu before the season starts; however, later is better than never. An injectable shot, not nasal spray flu vaccine, is recommended this flu season. To better match the viruses circulating this season, the flu vaccines have been updated.

The CDC recommends getting a flu vaccine.

“Flu vaccines provide protection against infection with the viruses that are in the vaccine, and therefore, they can prevent infection and potential hospitalization and even reduce symptoms,” Del Valle says.

She notes that the flu spreads from person to person through coughing, sneezing, and talking. “A person could get the flu by touching a surface or object that has flu virus on it; therefore, we recommend people wash their hands, cover their mouths when sneezing or coughing, and stay away from people when they’re sick.”

Some clinics in New Mexico offer free flu shots to the public. [Click here for a schedule and clinics](#), or call your local public health office for more information.

Osthus adds, “Starting in November, our forecasts along with forecasts from other teams throughout the country will be available and will be updated throughout the 2016–2017 flu season.”

Don’t let flu get you down this season.

Los Alamos National Laboratory

www.lanl.gov

(505) 667-7000

Los Alamos, NM

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