

USA Seasonal Flu Report

For the week ending October 12, 2013

Table of Contents

3-4 National Overview

What is the current situation and how does it compare to previous years?

5 Top 10 Cities at Risk

 Tracking urban hotspots through Palantir analytics, Google Flu Trends and key demographic risk factors

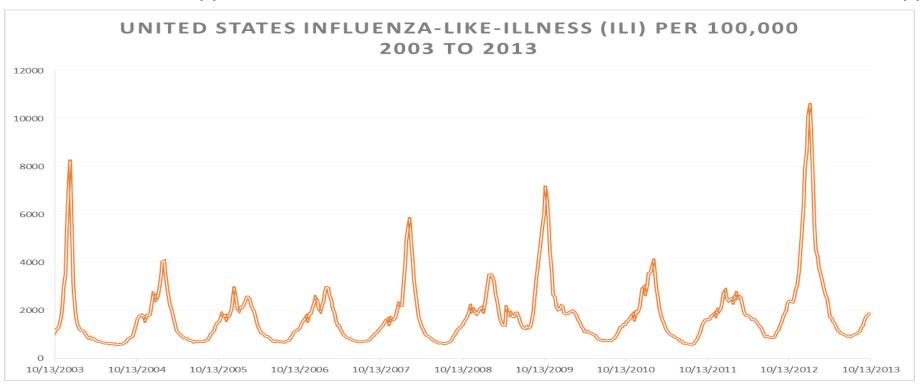
6 Safety Net Health Centers in High Risk Areas

- Where is the safety net located within identified high risk cities?
- Where is Direct Relief receiving requests for assistance?

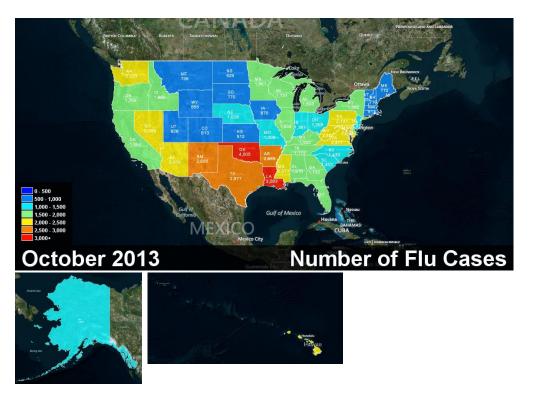
7 Flu in the News

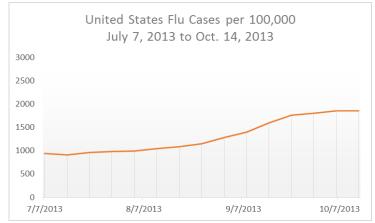
• Using HealthMap.org and Palantir to monitor flu discussions in the press

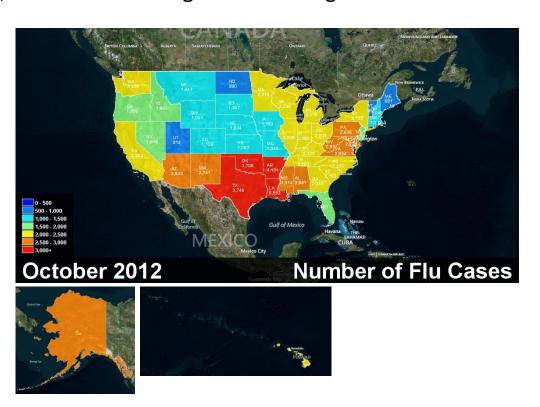
The Centers for Disease Control (CDC) estimates that seasonal influenza kills an average number of 36,000 people in the United States annually, making it a severe recurrent health threat. Vaccination coverage has improved in recent years, but the influenza virus mutates rapidly and can spread with alarming speed, scale, and scope. In 2009, the world was taken by surprise by the novel H1N1 influenza virus, which the World Health Organization declared a pandemic, while 2012 saw more conventional strains grow to an unusually high winter peak. This year, concern is high about flu detection due to the government shutdown and the temporary closure of the CDC's seasonal influenza surveillance system. In lieu of CDC reports, Direct Relief is using open source epidemiology from Google Flu Trends and Healthmap.org along with Palantir analytics and background demographic analysis on risk factors to understand how seasonal influenza may be affecting the network of over 1100 safety net health facilities which Direct Relief supports nationwide with donations of essential medicines and medical supplies.

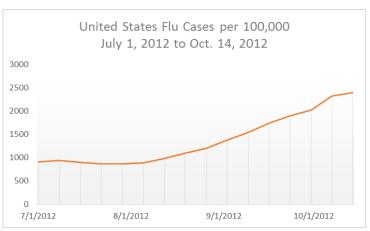


This year's seasonal flu spread does not look so far to be as serious as last year's. Risk remains elevated particularly in the Southern states from New Mexico across to Arkansas to Louisiana, with Nevada being somewhat higher than in 2012.

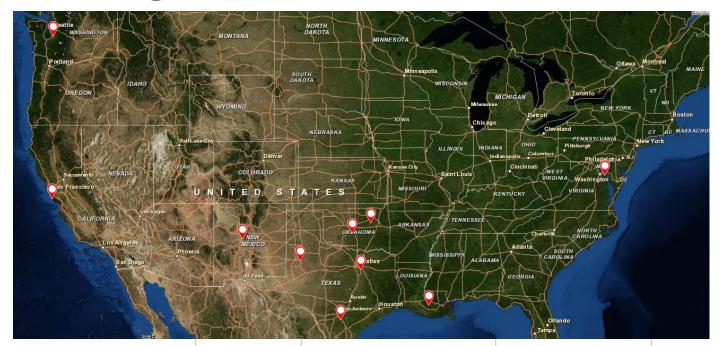








10 High Risk Cities to Watch



These 10 cities represent high risk areas across the country with significant rates of influenza-like Illness (ILI) per 100,000 as well as a combination of high rates of change in ILI, high volatility in rates of ILI and/or risk factors associated with large proportions of young or elderly populations.

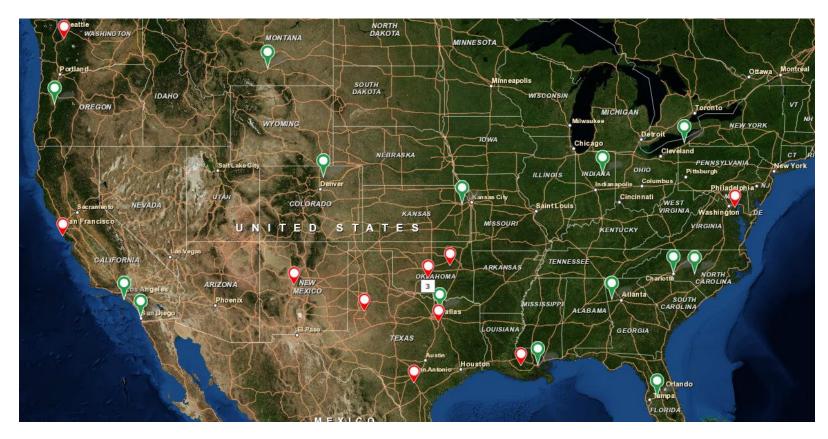
| City | State | County Population | ILI per 100,000 | Δ ILI (Prev. Week) | County Age 0-9 | County Age 65+ |
|------------------|-------|--------------------------|-----------------|--------------------|----------------|----------------|
| Addison (Dallas) | TX | 2,415,058 | 5702 | -8 | 376,349 (16%) | 207,927 (9%) |
| Oklahoma City | OK | 740,095 | 4487 | +167 | 106,223 (15%) | 86,357 (12%) |
| San Antonio | TX | 1,793,579 | 3088 | -23 | 260,394 (15%) | 175,883 (10%) |
| Tulsa | OK | 617,409 | 3145 | -19 | 88,032 (15%) | 72,856 (12%) |
| Albuquerque | NM | 675,683 | 2890 | +22 | 89,881 (14%) | 81,014 (12%) |
| Lubbock | TX | 287,484 | 2893 | +46 | 39,432 (14%) | 30,622 (11%) |
| Seattle | WA | 1,997,548 | 2566 | -33 | 233,589 (12%) | 210,679 (11%) |
| San Francisco | CA | 825, 162 | 2544 | +42 | 63,665 (8%) | 109,842 (14%) |
| Baltimore | MD | 620,947 | 2370 | -30 | 76,593 (12%) | 72,812 (12%) |
| Baton Rouge | LA | 445,964 | 2534 | -18 | 57,761 (13%) | 48,030 (11%) |

Sources: Google Flu Trends; US Census Bureau 2010

Note: National average for both 0-9 and 65+ population is 13%.

Safety Net health centers across the country are making requests for flu vaccine.

August 15th to Oct 6th



| Partner Name | Location | State |
|--------------------------------------|----------------|-------|
| Montana Migrant Council Clinic | Billings | MT |
| Harbor Community Clinic | San Pedro | CA |
| Sunrise Monfort Medical Clinic | Evans | СО |
| Volunteers in Medicine Clinic | Springfield | OR |
| Central Florida Health Care | Lakeland | FL |
| La Maestra Family Clinic | San Diego | CA |
| Avenue F Family Health Center | Plano | TX |
| El proyecto | Arleta | CA |
| Ralpha Clinic of West Georgia | Temple | GA |
| Moore Free Care Clinic | Southern Pines | NC |
| Christian Community Action | Lewisville | TX |
| St. Paul's Free Clinic | Erie | PA |
| Bridges to Health | Marion | IN |
| EXCELth, Inc. | New Orleans | LA |
| Children and Community Health Center | McKinney | TX |
| C.W. Williams CHC | Charlotte | NC |
| Health Care Access | Lawrence | KS |

Red points represent at-risk metro areas.

Green points represent Direct Relief partner requests.

FLU IN THE NEWS:

HealthMap.org is an open-source epidemiological tool which tracks infectious disease through geocoded online news articles. Below is a selection of key flu publications from across the country since Oct. 7. The geographic distribution of flu-related stories since Sept. 1 to the right.



| | | | Mexico City Tabil Ordinous un said |
|-----------|-------------|------------------------------|--|
| ite Range | Source | Geography | Description and URL |
| 14-Oct-13 | Google News | Dallas County, Texas | Health Officials Say Getting The Flu Vaccine Is The Best Way To Prevent Contracting Influenza. http://www.nbcdfw.com/news/health/Dallas-County-Reports-First-Flu-Related-Death-227736411.html |
| 11-Oct-13 | Google News | Davison County, South Dakota | Pierre, South Dakota — The First Flu Has Been Reported In South Dakota For The Season. http://www.dailyjournal.net/view/story/73a0e45ff47a438f9cd6dcd7c00a9dba/SDFirst-Flu/ |
| 11-Oct-13 | Google News | lowa | Influenza Surveillance Also Gives An Indication Of The Types Of Influenza Viruses Circulating. http://www.cbs2iowa.com/news/features/top-stories/stories/three-flu-cases-reported-iowa-22970.shtml |
| 9-Oct-13 | Google News | South Dakota | And As We Enter Flu Season, There Is A Bit Of Worry About The Centers For Disease Control. http://www.ksfy.com/story/23652649/south-dakota-continues-to-monitor-flu-cases-while-cdc-staff-remains-furloughed |
| 8-Oct-13 | Google News | Maricopa County, Arizona | A Flu Case Was Confirmed In Pima County Tuesday And Health Officials Say Now Is The Time To Get Immunized. http://azstarnet.com/news/local/first-flu-case-of-season-confirmed-in-pima-county/article_f2f593ea-307e-11e3-867c-001a4bcf887a.html |
| 7-Oct-13 | Google News | New Jersey | First flu cases reporting in New Jersey. http://www.newsworks.org/index.php/health-science/item/60513-first-flu-cases-reported-in-new-jersey?Itemid=248 |
| 7-Oct-13 | Google News | Arizona | Phoenix — Health Officials Say They've Confirmed Arizona's First Case Of The Flu This Season. http://www.dailyjournal.net/view/story/4c45330c1e124e93a7cdd33a740233c1/AZArizona-Flu-Season/ |
| 7-Oct-13 | Google News | Arizona | As Sure As The Return Of Winter Visitors To Arizona Is The Annual Fall Arrival Of Flu Season. http://www.kpho.com/story/23629029/first-flu-case-of-season-confirmed-in-maricopa-county |
| 7-Oct-13 | Google News | Williamson County, Texas | The Scott & White Hospital Microbiology Lab Monday Confirmed That Three Adults Have Tested Positive For Flu A Or Flu B, Two In Bell County And One In Williamson County. http://www.kwtx.com/news/health/headlines/Flu-Cases-Confirmed-In-Central-Texas-226789621.html |

This report is produced in collaboration with **Q** Palantir.

