

Flu activity trending downwards, still high; US midseason vaccine effectiveness estimate higher than expected

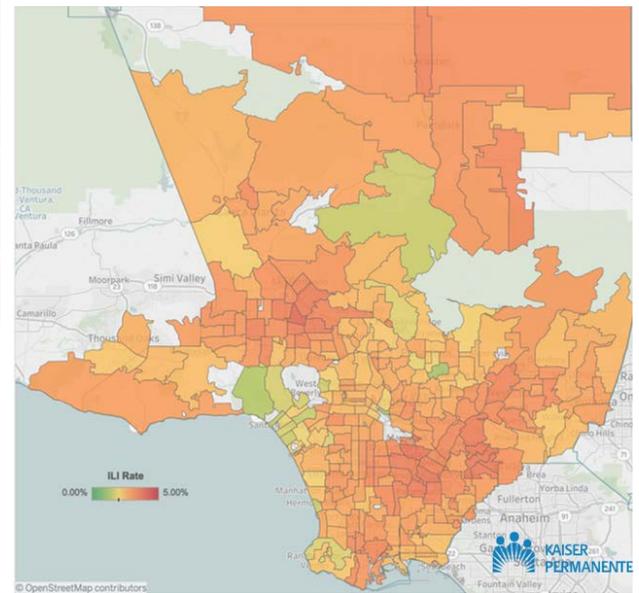
Overall, influenza (flu) activity remains elevated, but has been declining since late December. In a typical flu season, flu A viruses predominate early in the season and flu B viruses increase later in the season. During surveillance week 6 (ending on February 10), 10.2% of the respiratory specimens tested at our surveillance labs were positive for flu. Of the flu positive respiratory specimens, 55% were flu B viruses. We have also seen a small uptick in ED visits related to influenza-like illness (ILI), which may be explained by the increasing predominance of flu B viruses.

On February 15th, [CDC published midseason influenza vaccine effectiveness estimates for the US](#). This report used data from 4,562 children and adults enrolled in the U.S. Influenza Vaccine Effectiveness Network (U.S. Flu VE Network) during November 2, 2017 – February 3, 2018. During this period, overall adjusted vaccine effectiveness (VE) against influenza A and B virus infection was 36% (95% CI: 27% to 44%). This means that the seasonal flu vaccine has reduced the risk of getting sick and having to go to the doctor from flu by about one third. Influenza A(H3N2) viruses were responsible for most (69%) of the flu infections reported in this study, and VE against influenza A(H3N2) viruses was 25%. Thus, the seasonal flu vaccines are providing some protection against A(H3N2) viruses in the US, in contrast to interim VE estimates from Canada and Australia that suggested the vaccine was not effective against A(H3N2) viruses. Compared with A(H3N2) viruses, VE was higher against A(H1N1) (67%) and flu B (42%) viruses. Of note, the overall VE was much higher among children aged 6 months to 8 years (59%). We continue to recommend vaccination for everyone 6 months of age and older.

	2017-2018		2016-2017	
	Week 6*	YTD†	Week 6	YTD
Percent Positive Flu Tests	10.2	21.4	20.4	10.0
Percent Flu A/B	45/55	80/20	98/2	92/8
Pediatric Flu Deaths‡		1		0
Adult Flu Deaths		157		53

*For the 2017-2018 season, week 6 starts 2/4/2018 and ends 2/10/2018.
†The influenza surveillance year started August 27, 2017.
‡Confirmed influenza death is defined by a positive lab test, ILI symptoms, and clear progression from illness to death.

Influenza-Like Illness (ILI) Activity Map by Zip Code Among Los Angeles County Kaiser Permanente (KP) Members for January 30 to February 13, 2018¹



¹ ILI Rate = [Number of unique KP members with ILI during 2-week period]/[Number of KP members in zip code]

