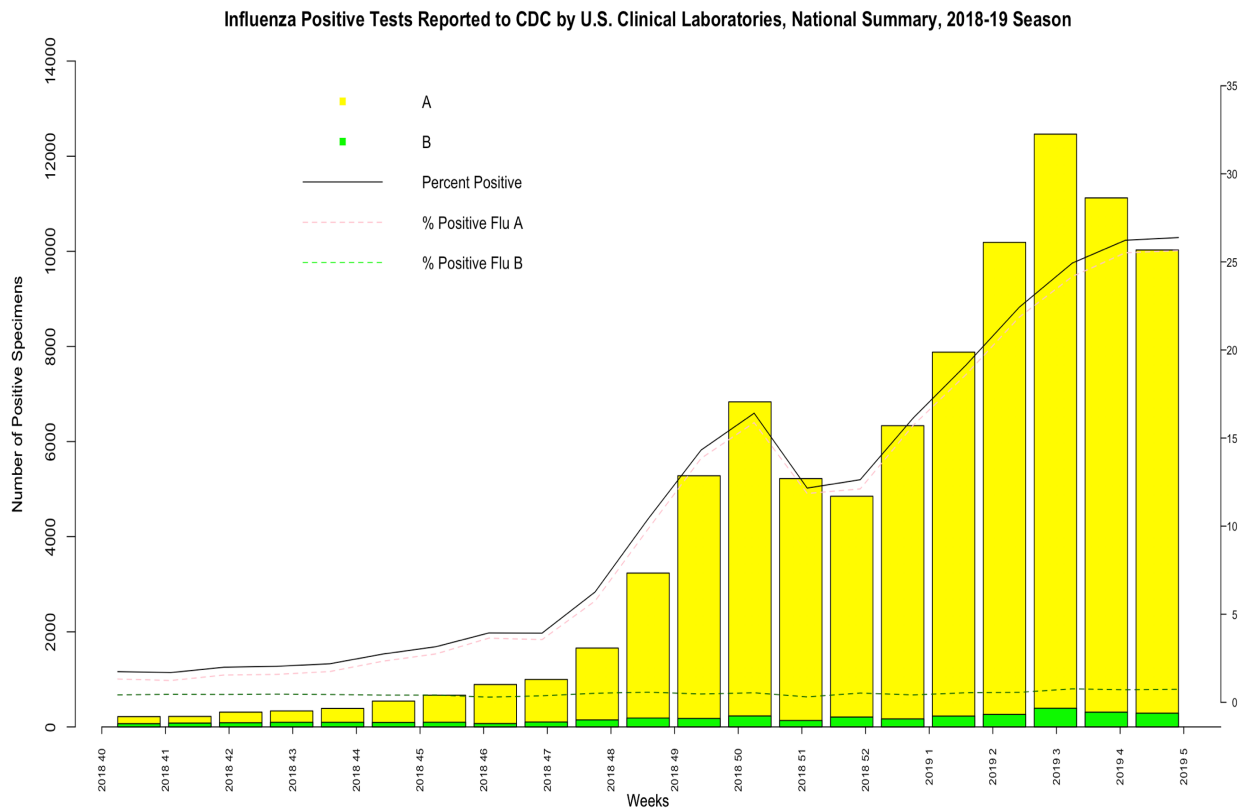


PART 2

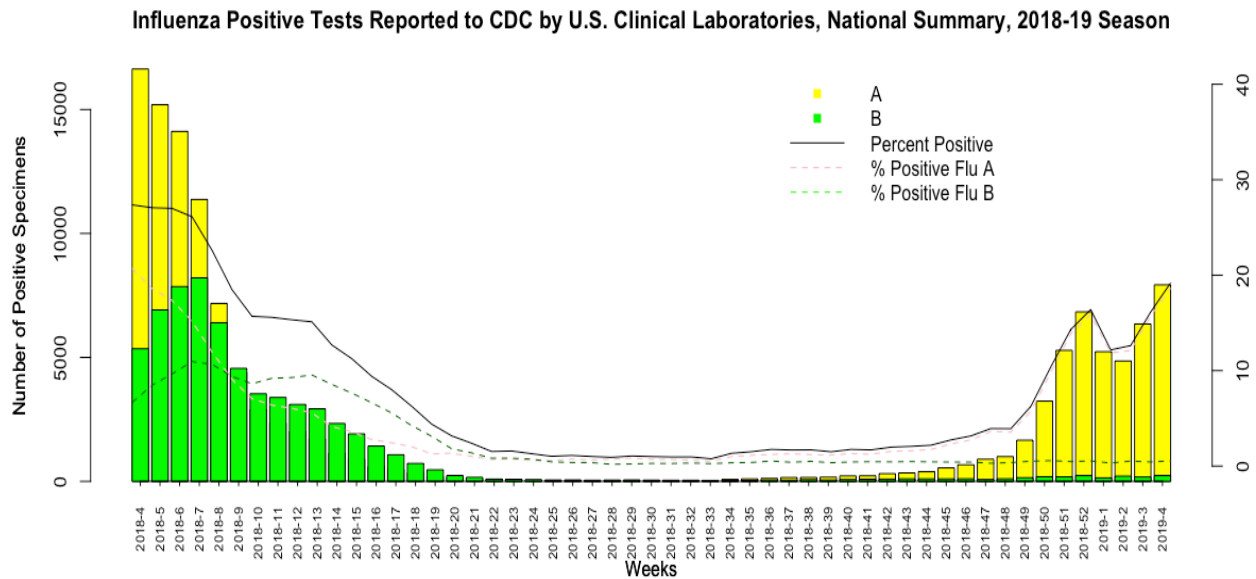
FLU CHARTS:

1) **Influenza national summary:** In this graph we are plotting Influenza positive tests Reported by CDC. We are Plotting number of positive Specimens against every week data. The **Yellow** bar plots are for the Influenza **Positive Test A** that lies under category: (H1N1)pdm09, H3N2, Subtyping not performed and Green bar plot that lies under category: **Yamagata lineage, Victoria lineage and Lineage not performed** is for the Influenza **Positive Test B**.

The lines in the graph are for plotting the percent of positive tested A and B.

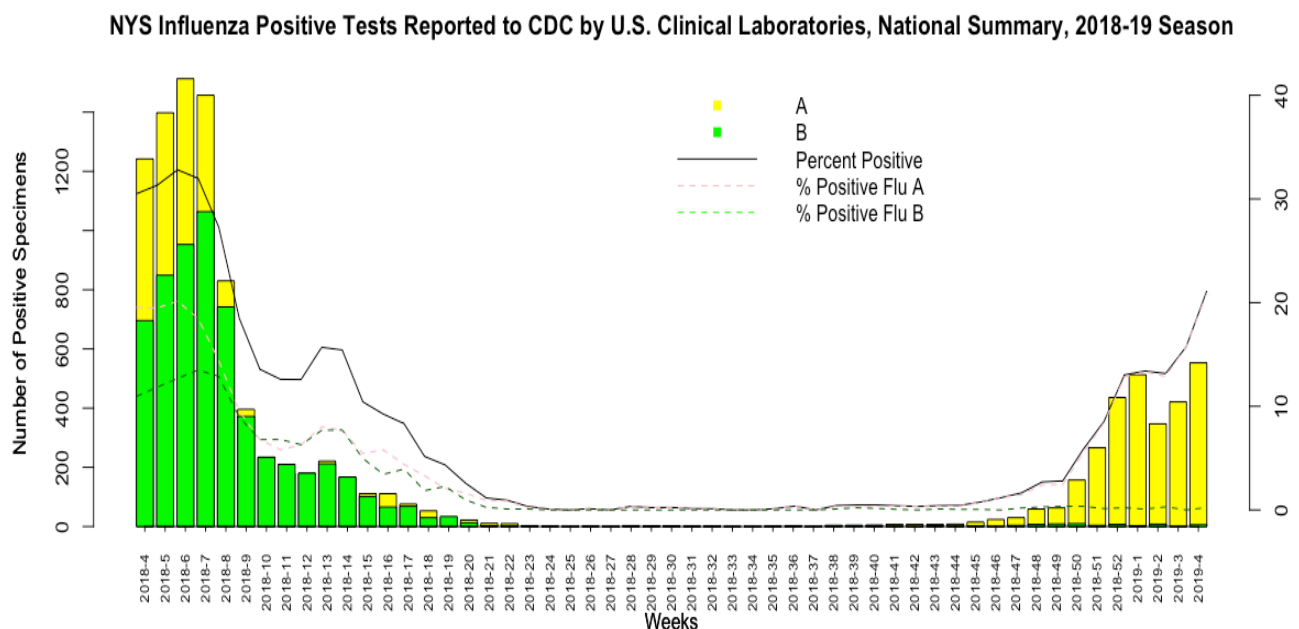


2) Influenza national summary for 52 Weeks: The above graph we are also plotting for 52-week data.



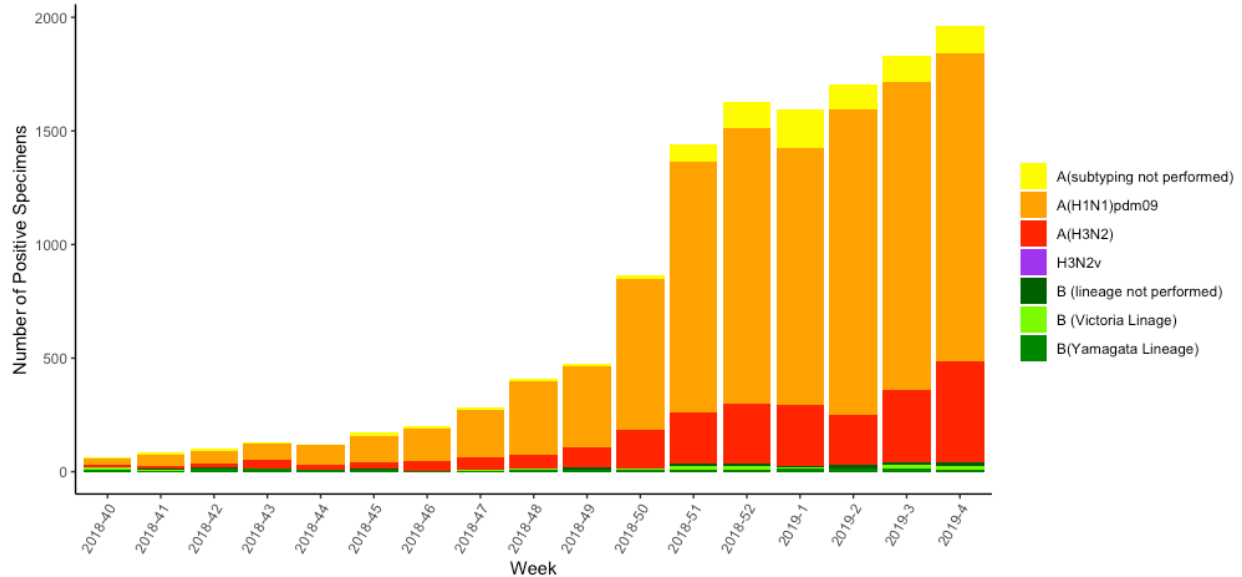
3) Influenza national summary for 52-week data plotted for NY state:

We are plotting the clinical health graph for New York state and we have collected clinical health data for a span of 52 weeks.

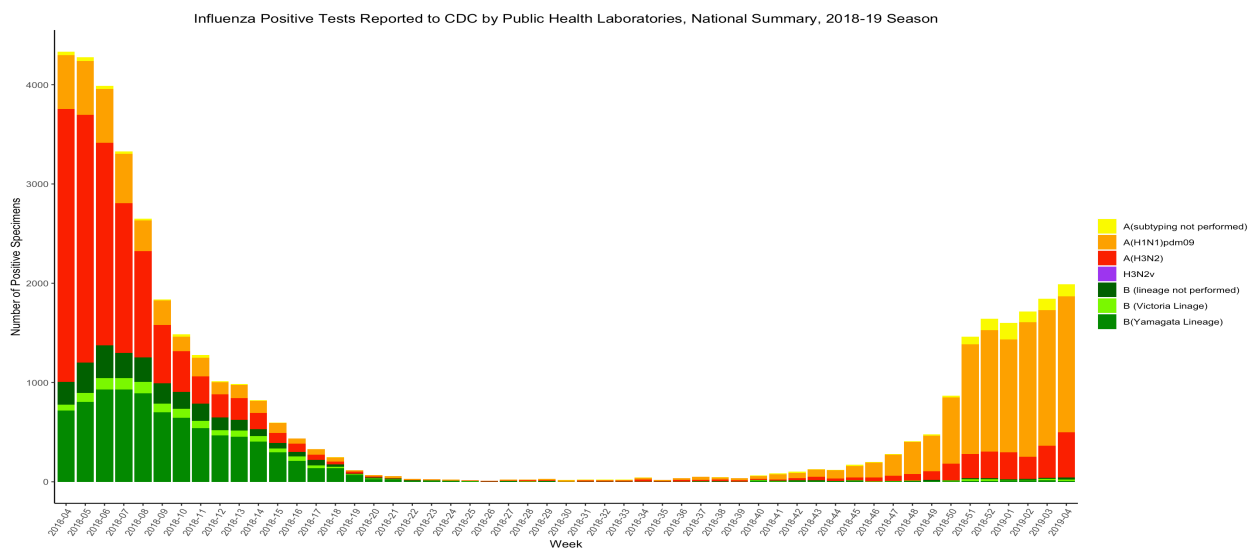


4) Influenza Positive Tests: We are plotting Influenza Positive Tests Reported to CDC by Public Health Laboratories, National Summary, 2018-19 Season. The different stacked bar plots show the different flu types like A(subtyping not performed)", A(H1N1)pdm09, A (H3N2), H3N2v, B (lineage not performed)", B (Victoria Lineage), B(Yamagata Lineage).

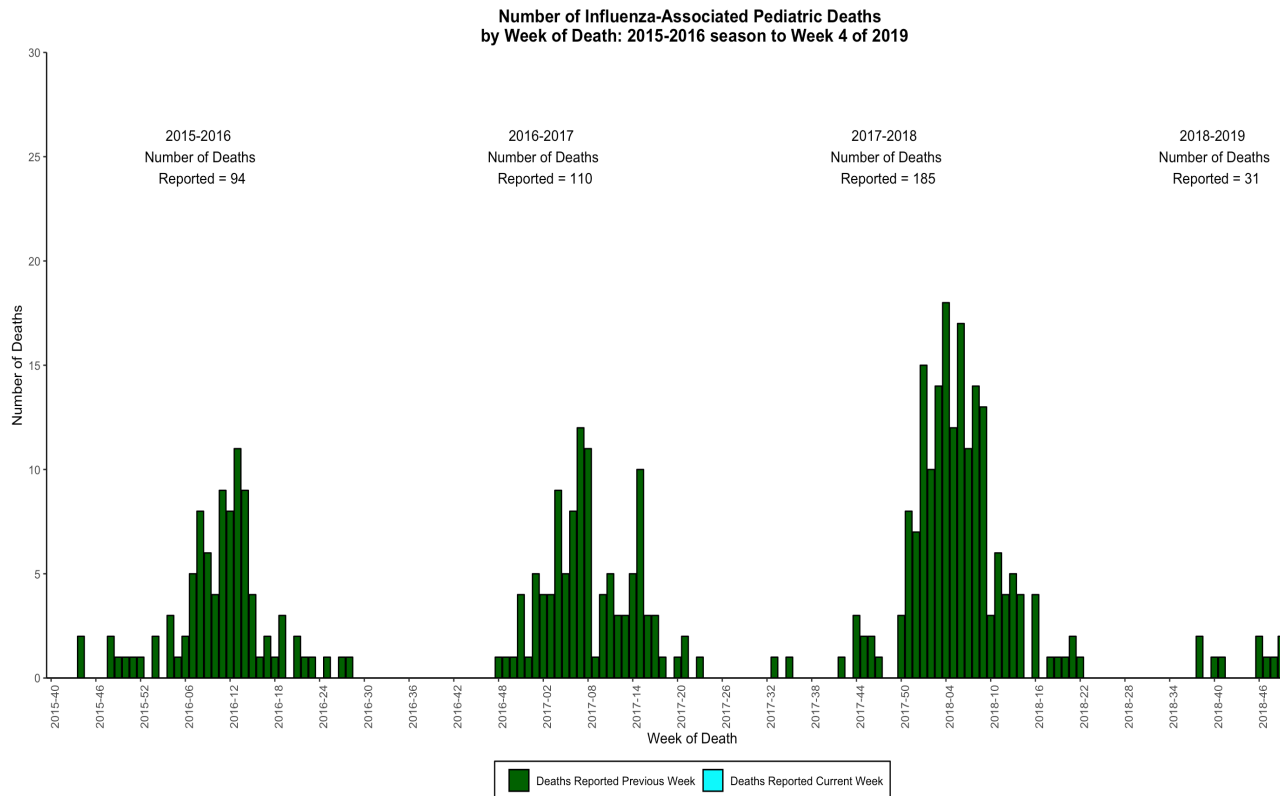
Influenza Positive Tests Reported to CDC by Public Health Laboratories, National Summary, 2018-19 Season



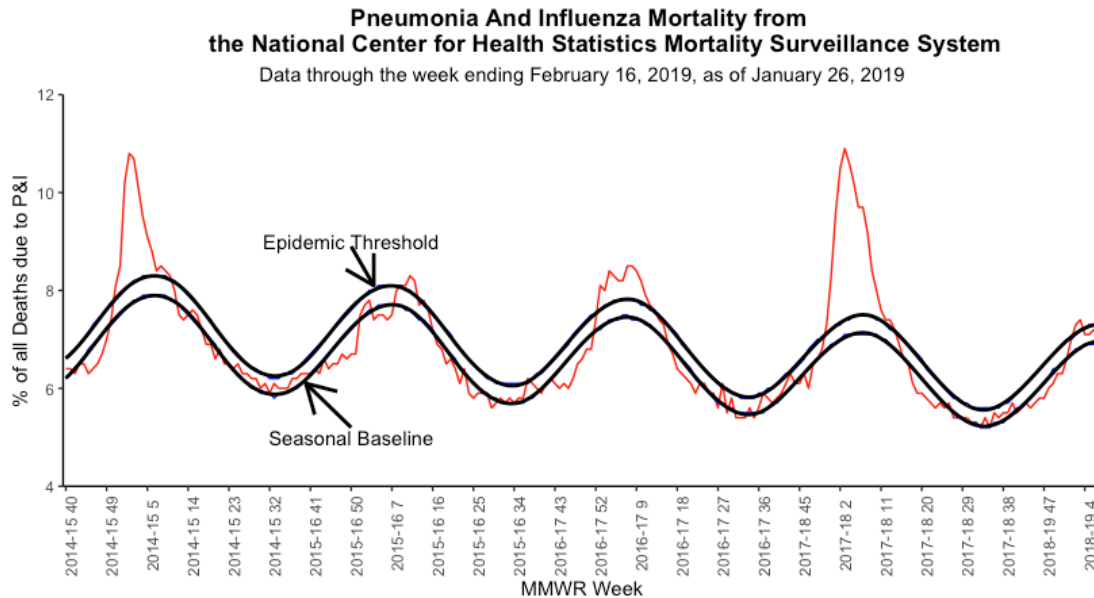
5) Influenza Positive Tests 52 Week data: We are plotting the above data for a span of 52 weeks:



6) Influenza-Associated Pediatric Mortality: Here we are plotting nine influenza-associated pediatric deaths were reported to CDC during week 9, eight of which occurred during the 2018-2019 influenza season. Four deaths were associated with an influenza A(H1N1)pdm09 virus and occurred during weeks 7, 8 and 9 (the weeks ending February 16, February 23 and March 2, 2019, respectively). The graph is plotted with Number of deaths on the Y axis and week of death on the x axis respectively



7) **Pneumonia and Influenza (P&I) Mortality Surveillance:** In this graph we are plotting the percentage of all the deaths due to P&I versus MMWR week. Based on National Center for Health Statistics (NCHS) mortality surveillance data available on March 7, 2019, 7.5% of the deaths occurring during the week ending February 23, 2019 (week 8) were due to P&I. This percentage is above the epidemic threshold of 7.3% for week 8.



8) **Heat Map:** We drew a heat map for Data collected in ILINet that used to produce a measure of ILI activity by state. Activity levels are based on the percent of outpatient visits in a state due to ILI and are compared to the average percent of ILI visits that occur during weeks with little or no influenza virus circulation.

