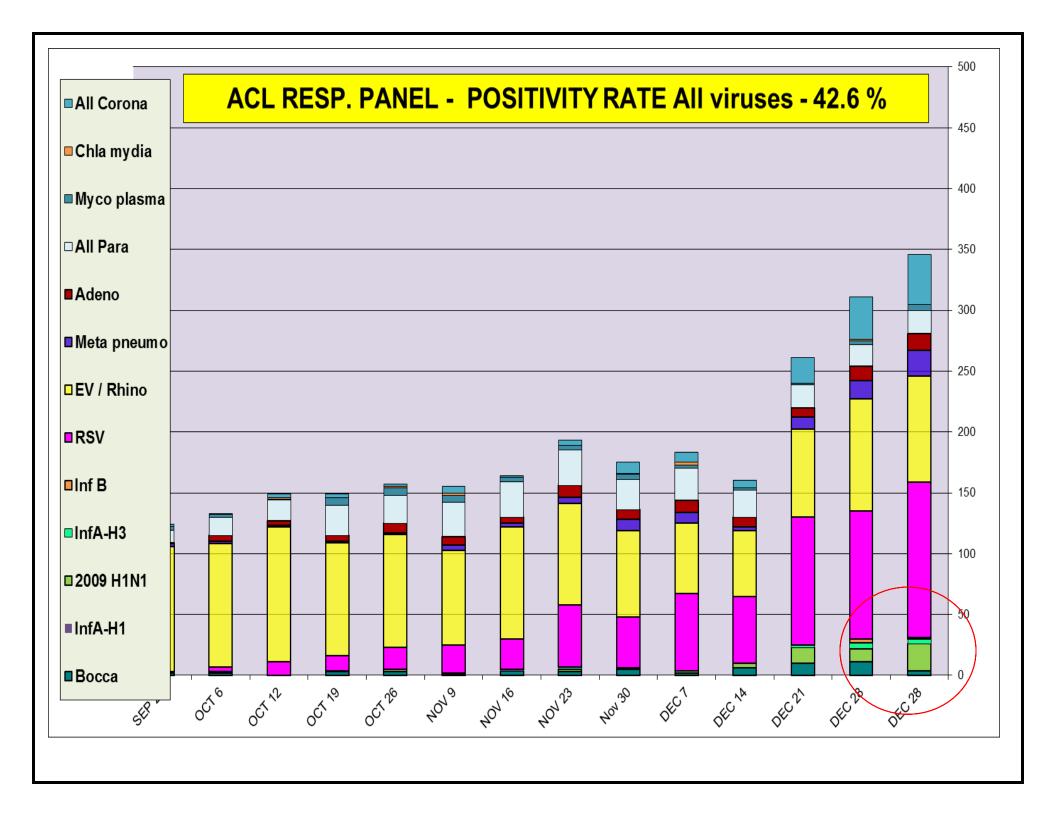
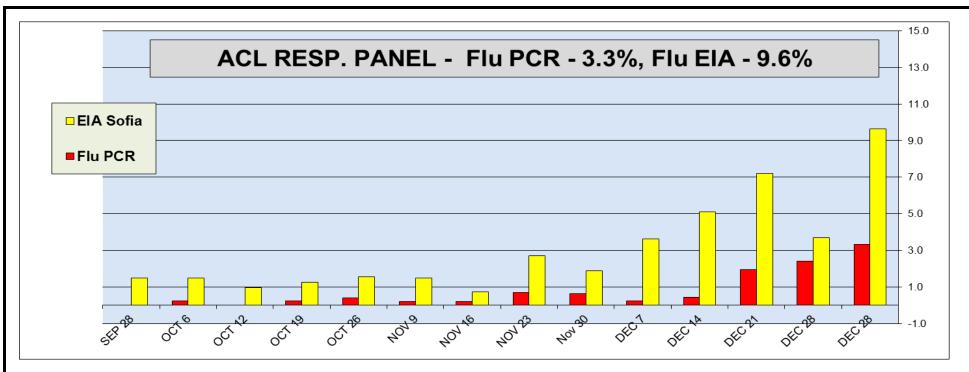
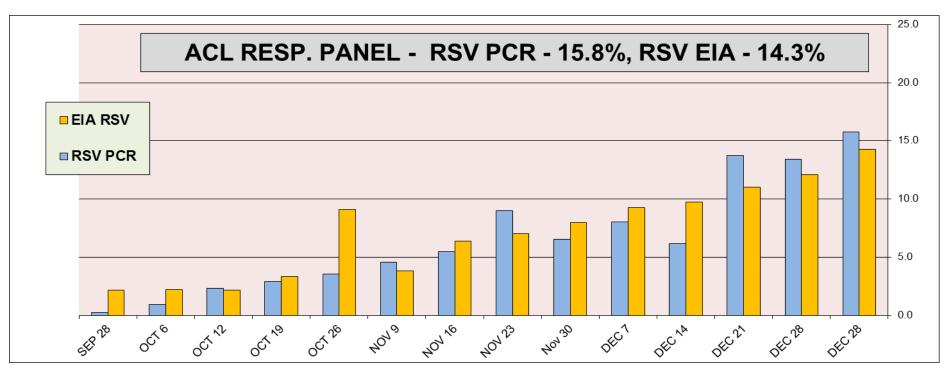
| | | | | | | Resp | irato | ry Pat | hoge | ens Da | ita Se | ep 28 | 2018 | - Jar | 5 20 | 19 | | | | |
|----------------|---------|---------|--------------|-------|-----|----------|--------------|----------------|-------|------------|--------|----------------|---------------|--------------|------------|-------|-------------|------------|--------------|--------------|
| Week Beginning | InfA-H1 | InfA-H3 | 2009 H1N1 | Inf B | RSV | All Para | EV/ Rhino | Meta pneumo | Adeno | All Corona | Восса | Myco plasma | Chla mydia | Total Pos | POS FLU | Total | ACL %FLU | US %FLU | IL/WI PCR | Sofia EIA |
| DEC 28 | 0 | 4 | 22 | 1 | 128 | 19 | 87 | 21 | 14 | 41 | 4 | 5 | 0 | 346 | 27 | 8/12 | 3.3 | n/a | n/a | 9.6 |
| DEC 28 | 0 | 5 | 11 | 3 | 105 | 18 | 92 | 15 | 12 | 35 | 11 | 3 | 1 | 311 | 19 | 78% | 2.4 | 13.7 | 9.0 | 3.7 |
| DEC 21 | 0 | 2 | 13 | 0 | 105 | 19 | 72 | 10 | 8 | 21 | 10 | 1 | 0 | 261 | 15 | 766 | 2.0 | 15.6 | 6.9 | Flu F |
| DEC 14 | 0 | 0 | 4 | 0 | 55 | 22 | 54 | 3 | 8 | 6 | 6 | 2 | 0 | 160 | 4 | 891 | 0.4 | 11.0 | 4.1 | % Ra |
| DEC 7 | 0 | 0 | 2 | 0 | 63 | 26 | 58 | 9 | 10 | 8 | 2 | 3 | 2 | 183 | 2 | 785 | 0.3 | 3.6 | 1.8 | 3.6 |
| Nov 30 | 0 | 0 | 1 | 0 | 42 | 25 | 71 | 9 | 8 | 9 | 5 | 4 | 1 | 175 | 1 | 641 | 0.6 | 4.2 | 1.9 | 1.9 |
| NOV 23 | 0 | 2 | 2 | 0 | 51 | 29 | 83 | 5 | 10 | 4 | 3 | 4 | 0 | 193 | 4 | 566 | 0.7 | 2.4 | 1.6 | 2.7 |
| NOV 16 | 1 | 0 | 0 | 0 | 25 | 29 | 92 | 3 | 5 | 1 | 4 | 4 | 0 | 164 | 1 | 457 | 0.2 | 1.7 | 1.5 | 0.7 |
| NOV 9 | 0 | 0 | 1 | 0 | 23 | 28 | 78 | 4 | 7 | 5 | 1 | 6 | 2 | 155 | 1 | 458 | 0.2 | 1.2 | 0.9 | 1.5 |
| OCT 26 | 0 | 0 | 2 | 0 | 18 | 23 | 93 | 1 | 8 | 2 | 3 | 6 | 1 | 157 | 2 | 506 | 0.4 | 0.9 | 0.7 | 1.6 |
| OCT 19 | 0 | 0 | 1 | 0 | 12 | 25 | 93 | 1 | 5 | 3 | 3 | 6 | 0 | 149 | 1 | 415 | 0.2 | 0.8 | 0.5 | 1.3 |
| OCT 12 | 0 | 0 | 0 | 0 | 11 | 17 | 111 | 1 | 4 | 3 | 0 | 1 | 1 | 149 | 0 | 478 | 0.0 | 0.6 | 0.4 | 1.0 |
| OCT 6 | 0 | 0 | 1 | 0 | 4 | 15 | 101 | 2 | 5 | 1 | 2 | 2 | 0 | 133 | 1 | 435 | 0.2 | 0.8 | 0.5 | 1.5 |
| SEP 28 | 0 | 0 | 0 | 0 | 1 | 10 | 103 | 2 | 1 | 2 | 2 | 3 | 0 | 124 | 0 | 410 | 0.0 | 0.9 | 0.6 | 1.5 |





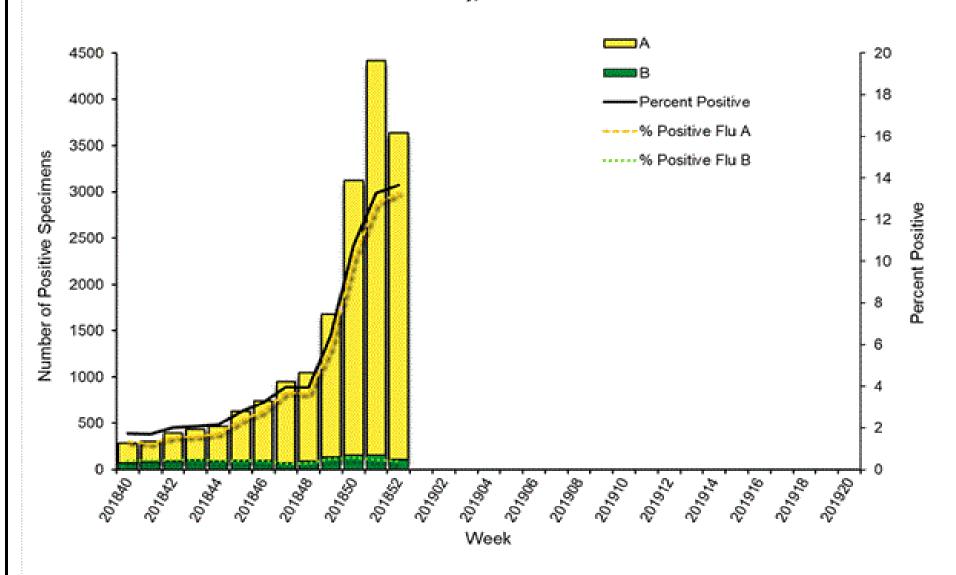


Correlation between RPPNL (FLU PCR) and Sofia (FLUAG) - Accuracy 99.2%

In the last two months 1038 samples were tested by both methods most of them negative, 13/18 samples were positive by EIA when confirmed by PCR. 6 negative EIA samples were tested positive by PCR method. (ACL correlation data is compiled on samples collected within <48 h)

| Nov 11 2018 to Jan 05 2019 | | | | | | | | | | | |
|--|---------------------------------|---------------------------------|-------|-------|--|--|--|--|--|--|--|
| FLUAG (Sofia) vs RPPNL (PCR) correlation | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | + | - | Total | | | | | | | |
| FluAG | + | 13 | 5 | 18 | | | | | | | |
| | - | 6 | 1038 | 1044 | | | | | | | |
| | | | Total | 1062 | | | | | | | |
| % | | | | | | | | | | | |
| 68.4 | Clinical Sensit | ivity | | | | | | | | | |
| 99.5 | Clinical Specif | | | | | | | | | | |
| 72.2 | Positive Predictive Value (PPV) | | | | | | | | | | |
| 99.4 | Negative Pred | Negative Predictive Value (NPV) | | | | | | | | | |
| 99.0 | Accuracy | | | | | | | | | | |

Influenza Positive Tests Reported to CDC by U.S. Clinical Laboratories, National Summary, 2018-2019 Season



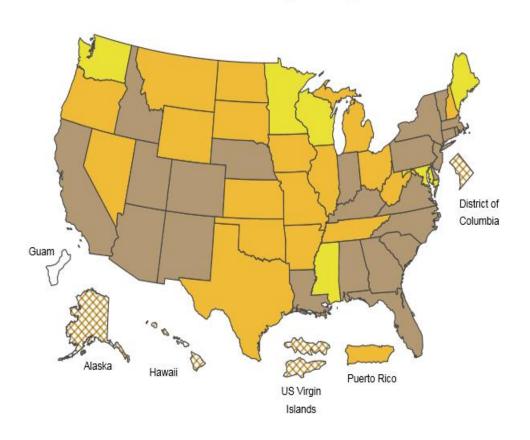
FLUVIEW



A Weekly Influenza Surveillance Report Prepared by the Influenza Division

Weekly Influenza Activity Estimates Reported by State and Territorial Epidemiologists*

Week Ending Dec 29, 2018 - Week 52



Influenza Activity Estimates



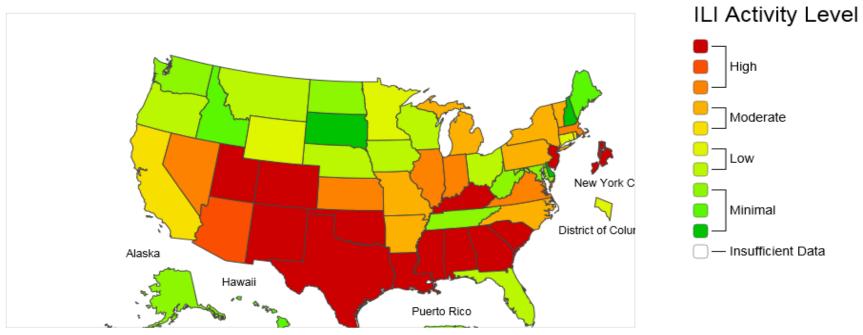
^{*}This map indicates geographic spread and does not measure the severity of influenza activity.



A Weekly Influenza Surveillance Report Prepared by the Influenza Division Influenza-Like Illness (ILI) Activity Level Indicator Determined by Data Reported to ILINet



2018-19 Influenza Season Week 52 ending Dec 29, 2018

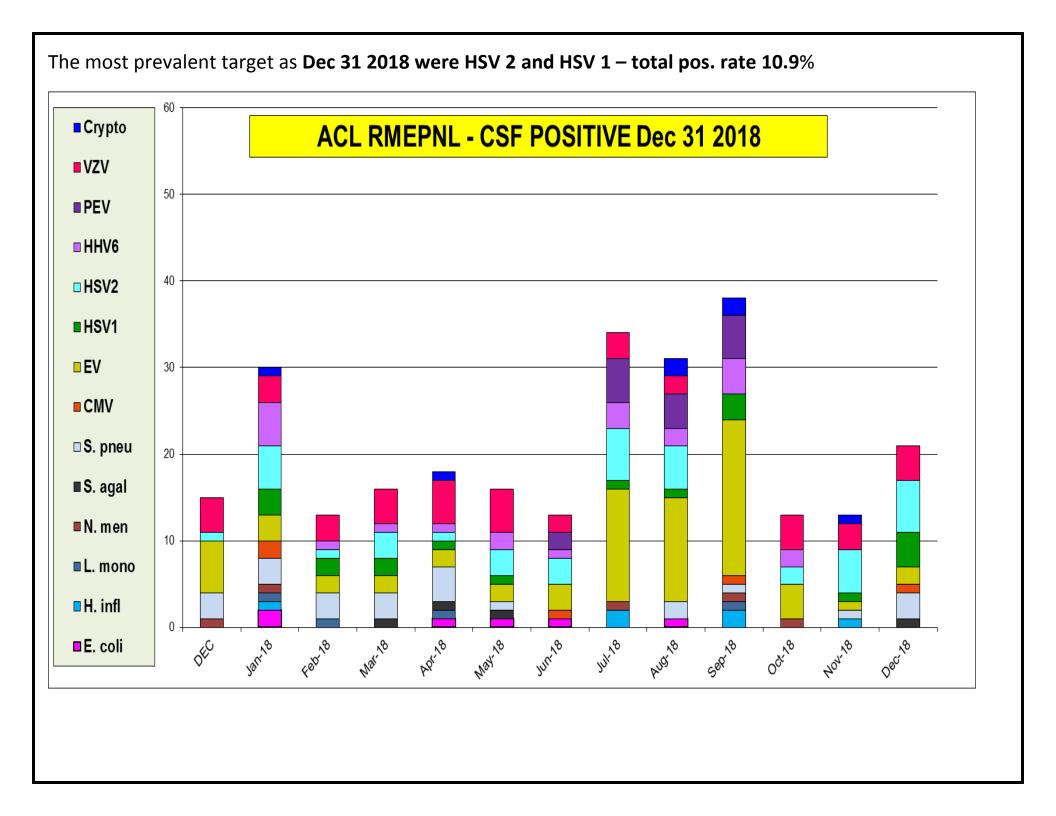


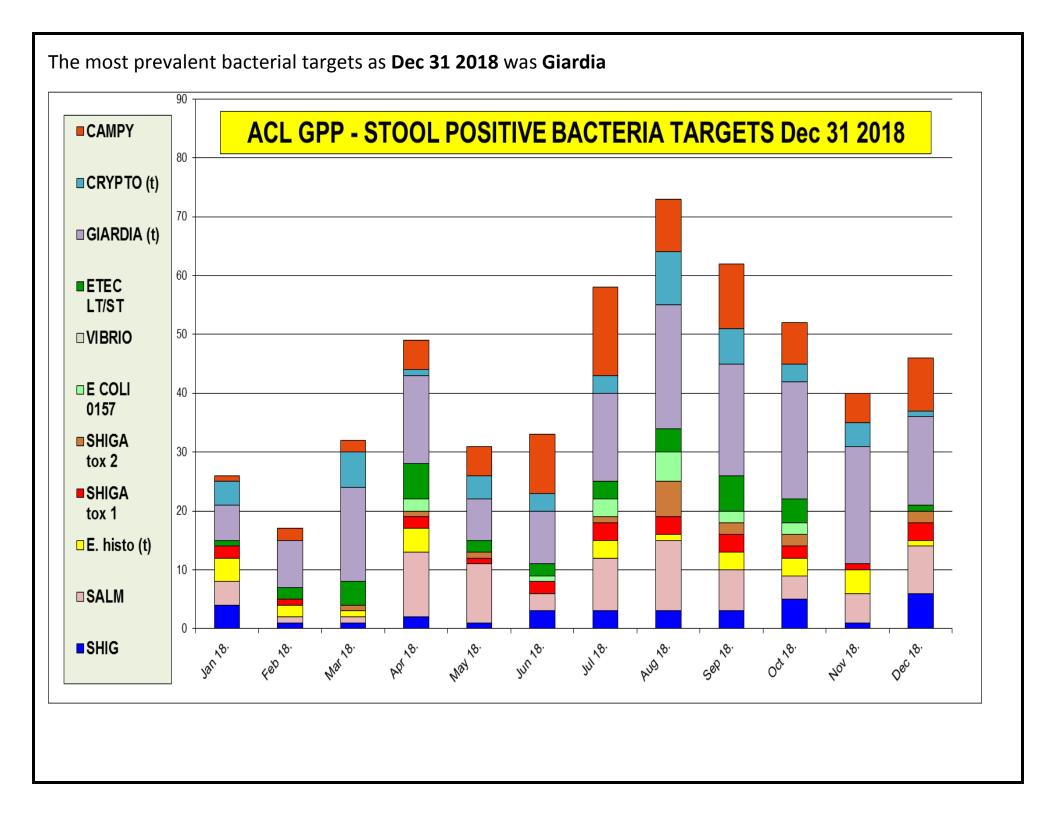
*This map uses the proportion of outpatient visits to healthcare providers for influenza-like illness to measure the ILI activity level within a state. It does not, however, measure the extent of geographic spread of flu within a state. Therefore, outbreaks occurring in a single city could cause the state to display high activity levels. *Data collected in ILINet may disproportionately represent certain populations within a state, and therefore may not accurately depict the full picture of influenza activity for the whole state.

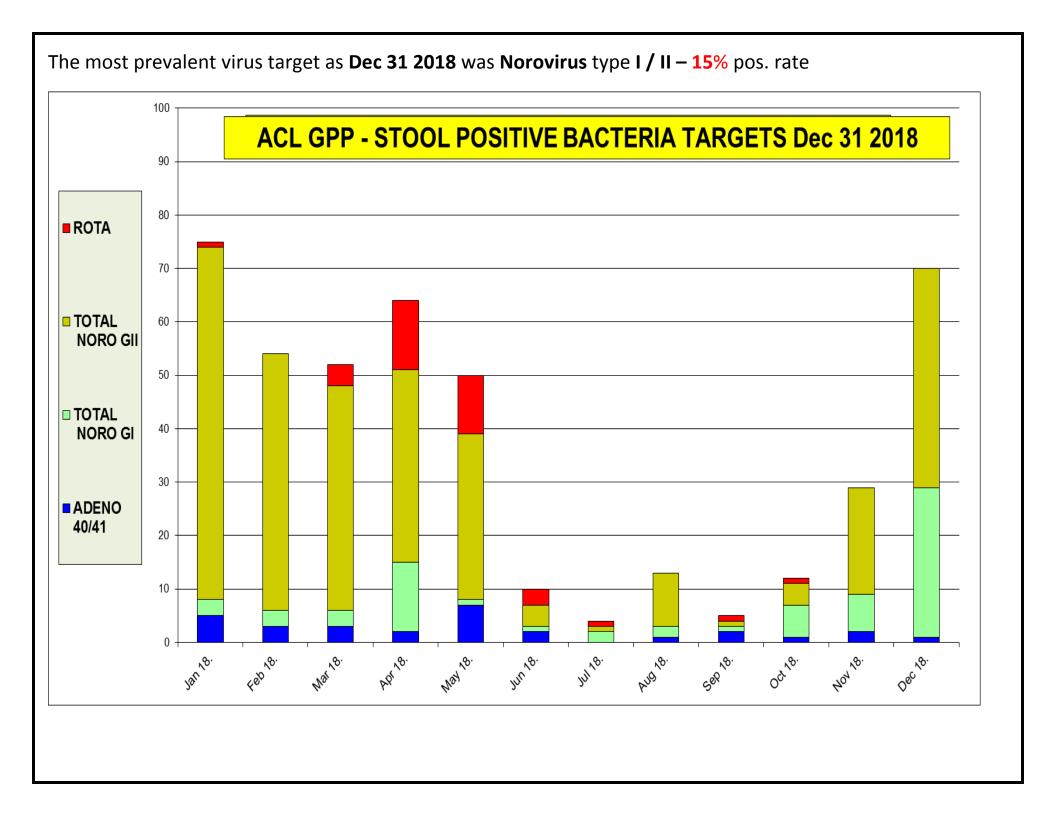
*Data displayed in this map are based on data collected in ILINet, whereas the State and Territorial flu activity map are based on reports from state and territorial epidemiologists. The data presented in this map is preliminary and may change as more data is received.

*Differences in the data presented by CDC and state health departments likely represent differing levels of data completeness with data presented by the state likely being the more complete.

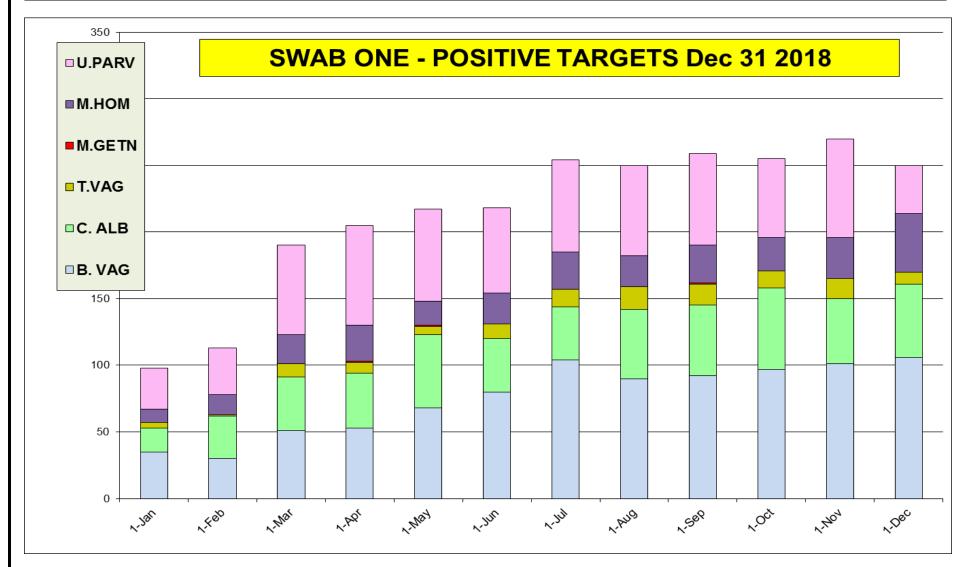
*For the data download you can use Activity Level for the number and Activity Level Label for the text description.







| | BV-Bacterial vagionosis | Candida albicans | Candida galbrata | Candida kruzei | T. vaginalis | M. genitalium | M. hominis | U. parvum | TOTAL % POS |
|-------|-------------------------|---------------------|---------------------|-------------------|-----------------|---------------|------------|-----------|----------------|
| % pos | 22.2 | 13.1 | 1.9 | 0.3 | 3.0 | 0.1 | 7.2 | 17.5 | 65.3 |



Neuraminidase Inhibitors Resistance in Samples Collected – as of Dec 28, 2018,

| Per CDC website | Oselt | amivir | Pera | mivir | Zanamivir | | |
|-------------------------|-----------------------------|---------------------------|-----------------------------|---------------------------|-----------------------------|---------------------------|--|
| | Virus Samples tested (n) | Resistant Viruses, (%) | Virus Samples tested (n) | Resistant Viruses, (%) | Virus Samples tested (n) | Resistant Viruses, (%) | |
| Influenza A (H1N1)pdm09 | 240 | 0 | 240 | 0 | 240 | 0 | |
| Influenza A (H3N2) | 106 | 0 | 106 | 0 | 106 | 0 | |
| Influenza B | 43 | 0 | 43 | 0 | 43 | 0 | |

There no resistance detected.