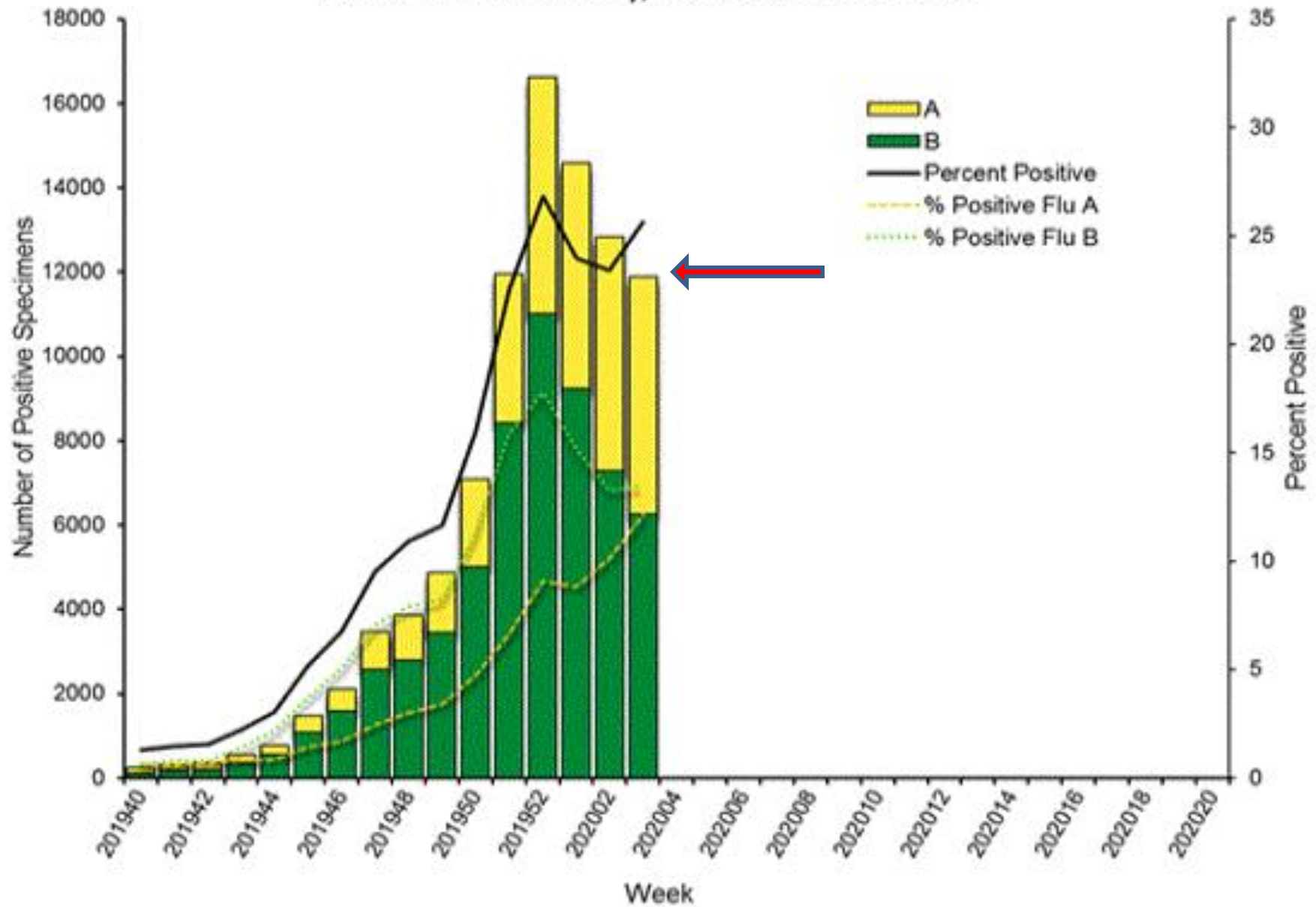


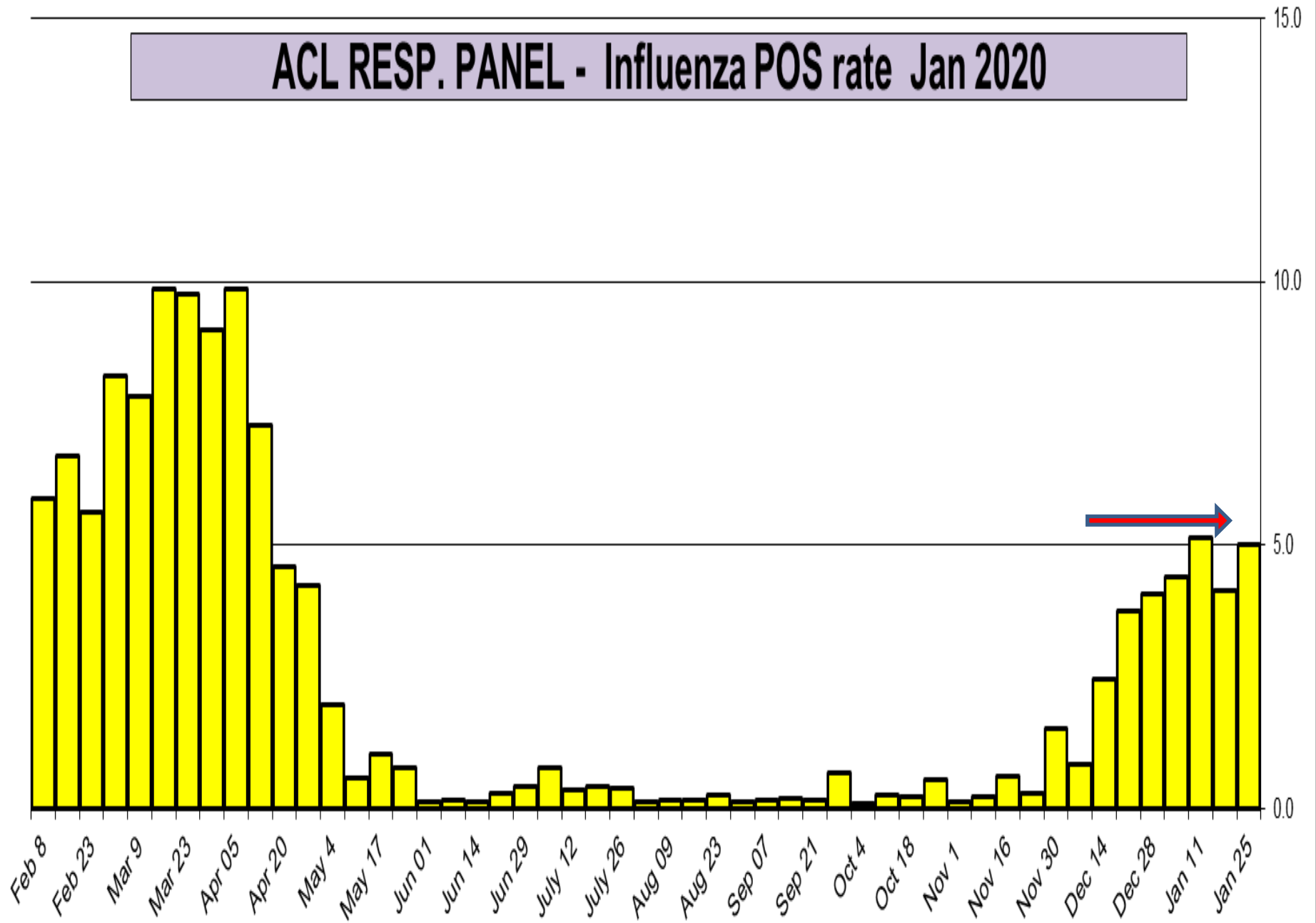
Respiratory Pathogens - Jan 25 2020

| Week | InfA-H1 | InfA-H3 | 2009 H1N1 | Inf B | RSV | All Para | EV / Rhino | Meta pneumo | Adeno | All Corona | Bocca | Myc. pneumo | Chlam. pneumo. | Legionella pneumo. | BP / BPP | Total Pos | POS FLU | Total | ACL RPPNL | US %FLU | IL/WI PCR | ACL FLUPCR |
|--------|---------|---------|-----------|-------|-----|----------|------------|-------------|-------|------------|-------|-------------|----------------|--------------------|----------|-----------|---------|-------|-----------|---------|-----------|------------|
| Jan 25 | 0 | 3 | 33 | 24 | 82 | 5 | 32 | 38 | 5 | 4 | 7 | 2 | 0 | 0 | 2 | 237 | 60 | 1197 | 5.0 | n/a | n/a | 39.1 |
| Jan 18 | 0 | 3 | 17 | 14 | 98 | 9 | 39 | 42 | 15 | 6 | 6 | 3 | 1 | 0 | 2 | 255 | 34 | 819 | 4.2 | 25.6 | 27.9 | 30.8 |
| Jan 11 | 0 | 4 | 26 | 22 | 113 | 13 | 39 | 60 | 16 | 2 | 3 | 5 | 0 | 0 | 1 | 304 | 52 | 1010 | 5.1 | 23.4 | 23.4 | 53.0 |
| Jan 4 | 0 | 3 | 18 | 24 | 119 | 17 | 52 | 61 | 21 | 9 | 13 | 4 | 1 | 0 | 0 | 342 | 45 | 1027 | 4.4 | 24.0 | 24.7 | 37.6 |
| Dec 28 | 0 | 4 | 7 | 22 | 107 | 11 | 72 | 27 | 17 | 3 | 14 | 0 | 0 | 0 | 6 | 290 | 33 | 809 | 4.1 | 26.8 | 26.9 | 38.9 |
| Dec 21 | 0 | 1 | 11 | 19 | 76 | 8 | 53 | 29 | 20 | 3 | 15 | 5 | 0 | 0 | 1 | 241 | 31 | 826 | 3.8 | 22.1 | 19.6 | 27.2 |
| Dec 14 | 0 | 4 | 8 | 6 | 55 | 13 | 65 | 22 | 14 | 2 | 3 | 5 | 0 | 0 | 6 | 203 | 18 | 737 | 2.4 | 16.3 | 12.0 | 17.6 |
| Dec 07 | 0 | 1 | 4 | 4 | 44 | 16 | 70 | 16 | 21 | 1 | 9 | 5 | 0 | 0 | 4 | 195 | 9 | 1060 | 0.8 | 11.3 | 7.2 | 12.9 |
| Nov 30 | 0 | 1 | 4 | 6 | 33 | 27 | 76 | 18 | 21 | 2 | 11 | 3 | 2 | 0 | 2 | 206 | 11 | 728 | 1.5 | 10.2 | 5.0 | 10.6 |
| Nov 23 | 0 | 0 | 0 | 3 | 26 | 26 | 75 | 8 | 21 | 1 | 3 | 7 | 0 | 0 | 3 | 171 | 3 | 1018 | 0.3 | 8.0 | 2.9 | 6.1 |
| Nov 16 | 0 | 1 | 0 | 5 | 17 | 28 | 81 | 6 | 14 | 3 | 7 | 3 | 0 | 0 | 2 | 167 | 6 | 1004 | 0.6 | 7.3 | 1.9 | 3.3 |
| Nov 9 | 0 | 2 | 0 | 0 | 8 | 16 | 76 | 6 | 9 | 1 | 7 | 4 | 0 | 0 | 3 | 132 | 2 | 844 | 0.2 | 5.7 | 0.9 | 2.8 |
| Nov 1 | 0 | 0 | 1 | 0 | 6 | 33 | 90 | 3 | 10 | 1 | 8 | 1 | 0 | 0 | 1 | 154 | 1 | 882 | 0.1 | 3.2 | 0.7 | 0.6 |
| Oct 25 | 0 | 3 | 0 | 2 | 7 | 26 | 105 | 3 | 5 | 2 | 3 | 7 | 0 | 0 | 1 | 164 | 5 | 887 | 0.6 | 2.4 | 0.8 | 1.1 |
| Oct 18 | 0 | 1 | 0 | 1 | 3 | 39 | 103 | 6 | 2 | 1 | 5 | 3 | 0 | 1 | 1 | 166 | 2 | 939 | 0.2 | 1.5 | 1.2 | 1.2 |

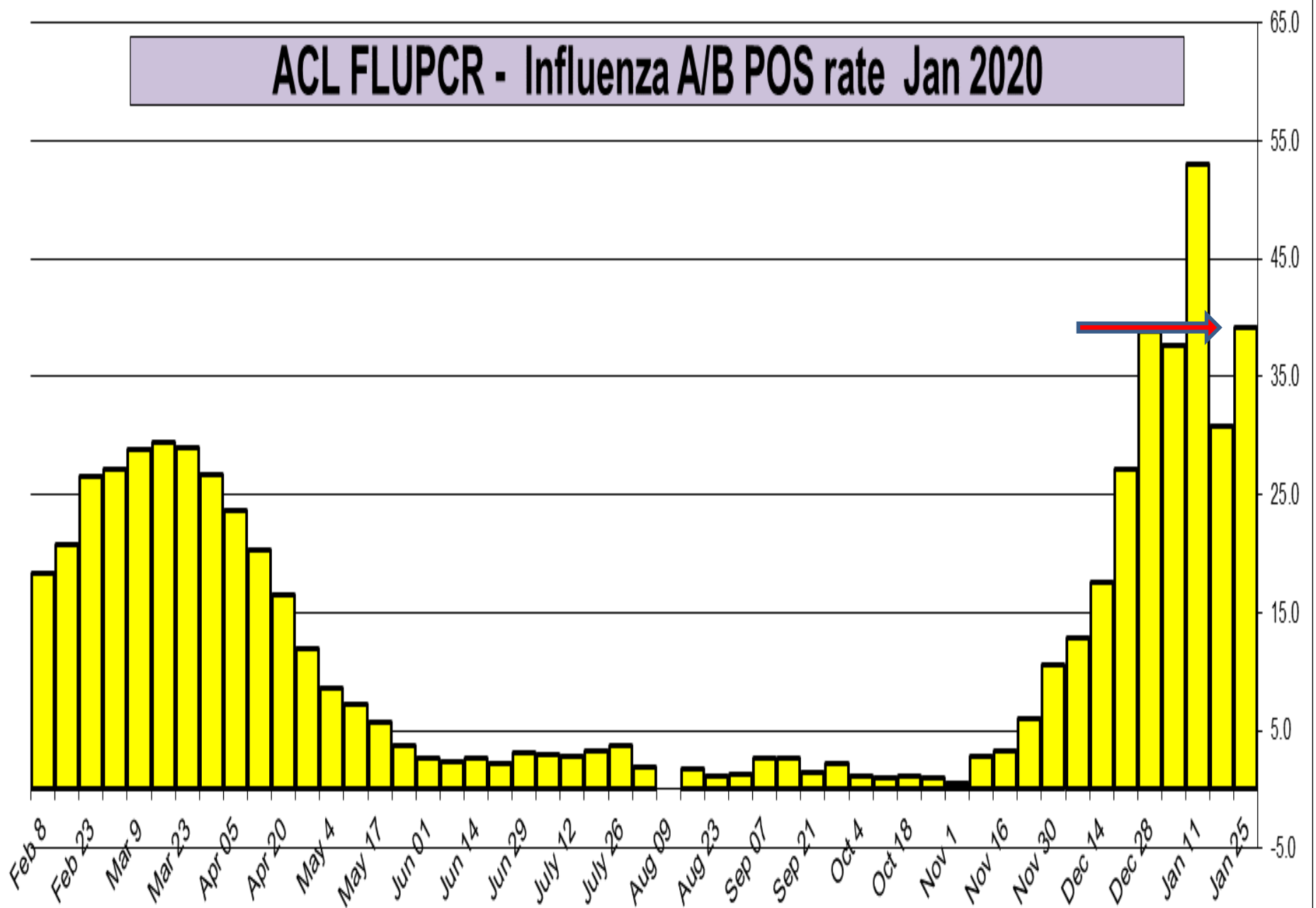
Influenza Positive Tests Reported to CDC by U.S. Clinical Laboratories, National Summary, 2019-2020 Season



ACL RESP. PANEL - Influenza POS rate Jan 2020



ACL FLUPCR - Influenza A/B POS rate Jan 2020



Neuraminidase Inhibitors Resistance in samples collected – as of Jan 18, 2019

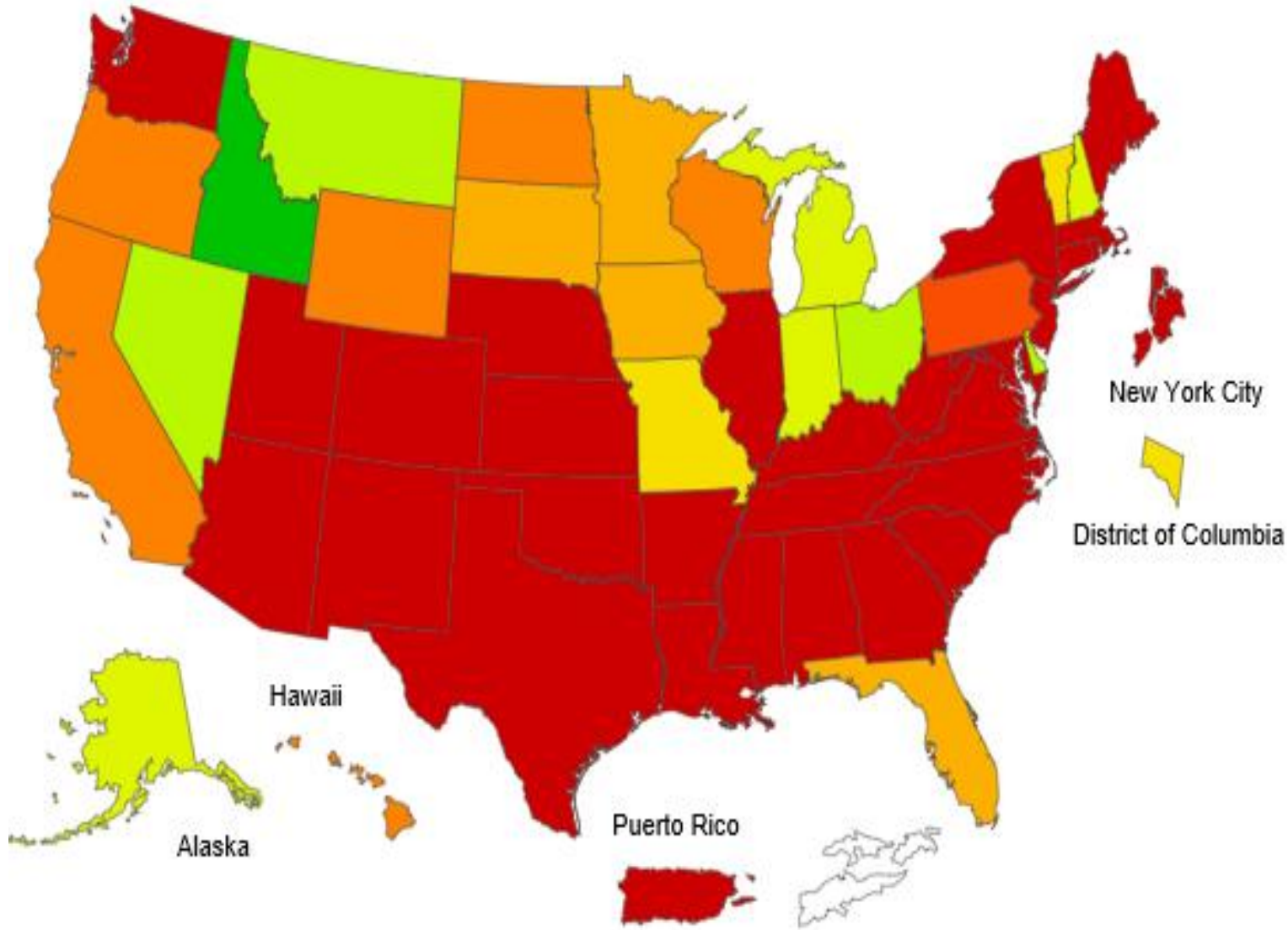
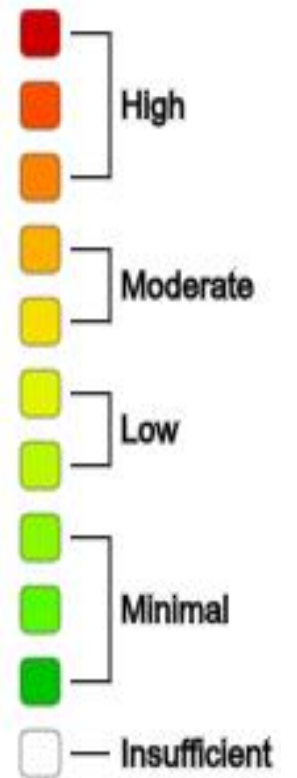
| | Oseltamivir | | Peramivir | | Zanamivir | |
|--------------------|--------------------------|------------------------|--------------------------|------------------------|--------------------------|------------------------|
| | Virus Samples tested (n) | Resistant Viruses, (%) | Virus Samples tested (n) | Resistant Viruses, (%) | Virus Samples tested (n) | Resistant Viruses, (%) |
| Inf A (H1N1) pdm09 | 339 | 0.3 | 339 | 0.3 | 339 | 0 |
| Inf A (H3N2) | 262 | 0 | 262 | 0 | 262 | 0 |
| Inf B | 475 | 0 | 475 | 0 | 475 | 0.2 |

PA Endonuclease Inhibitor Resistance

| | Baloxavir | | | | | |
|--------------------|--------------------------|------------------------|--|--|--|--|
| | Virus Samples tested (n) | Resistant Viruses, (%) | | | | |
| Inf A (H1N1) pdm09 | 338 | 0 | | | | |
| Inf A (H3N2) | 261 | 0 | | | | |
| Inf B | 472 | 0 | | | | |

2019-20 Influenza Season Week 3 ending Jan 18, 2020

ILI Activity Level



ACL RESP. PANEL - POS Rate Selected viruses

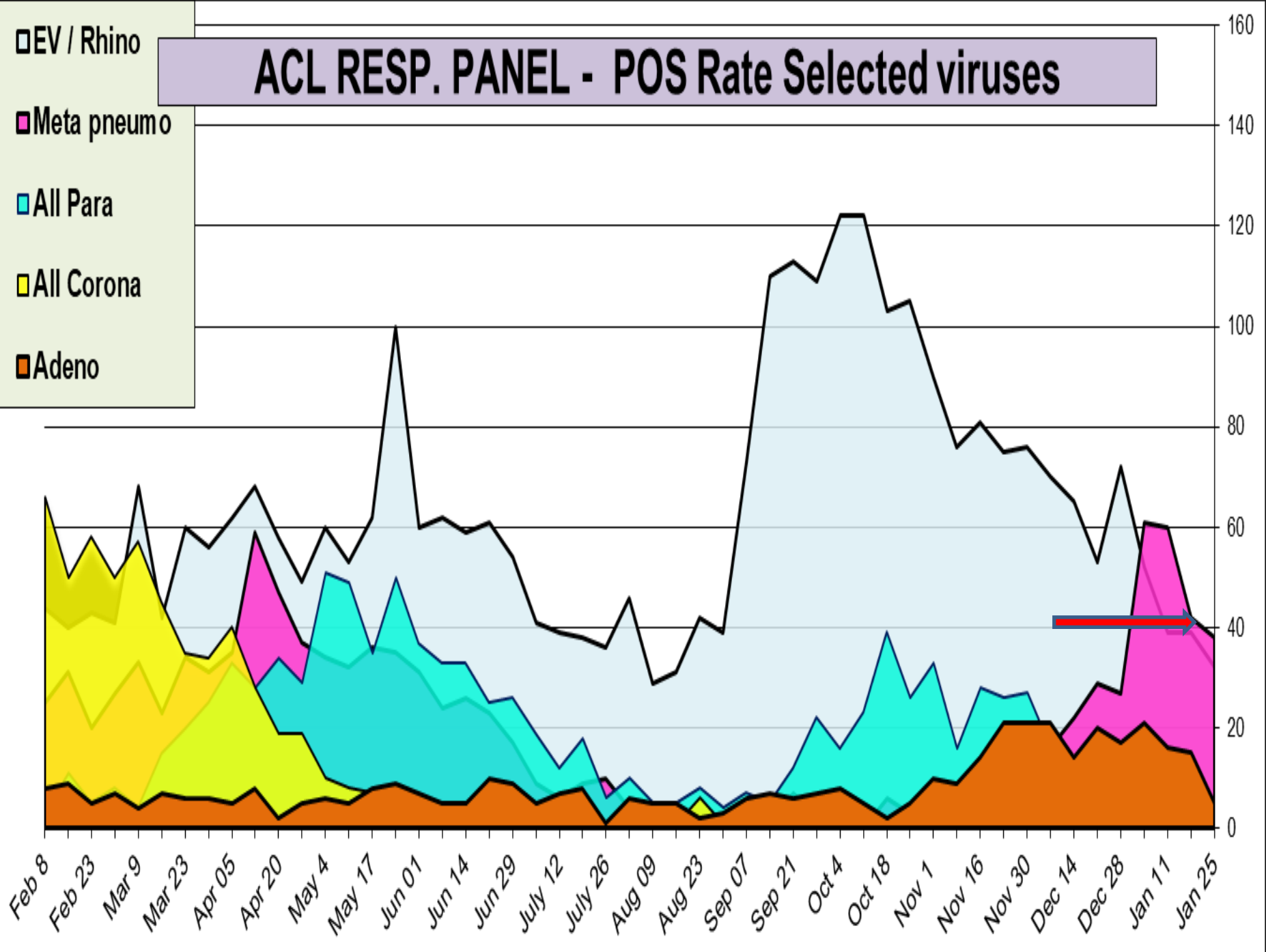
□ EV / Rhino

■ Meta pneumo

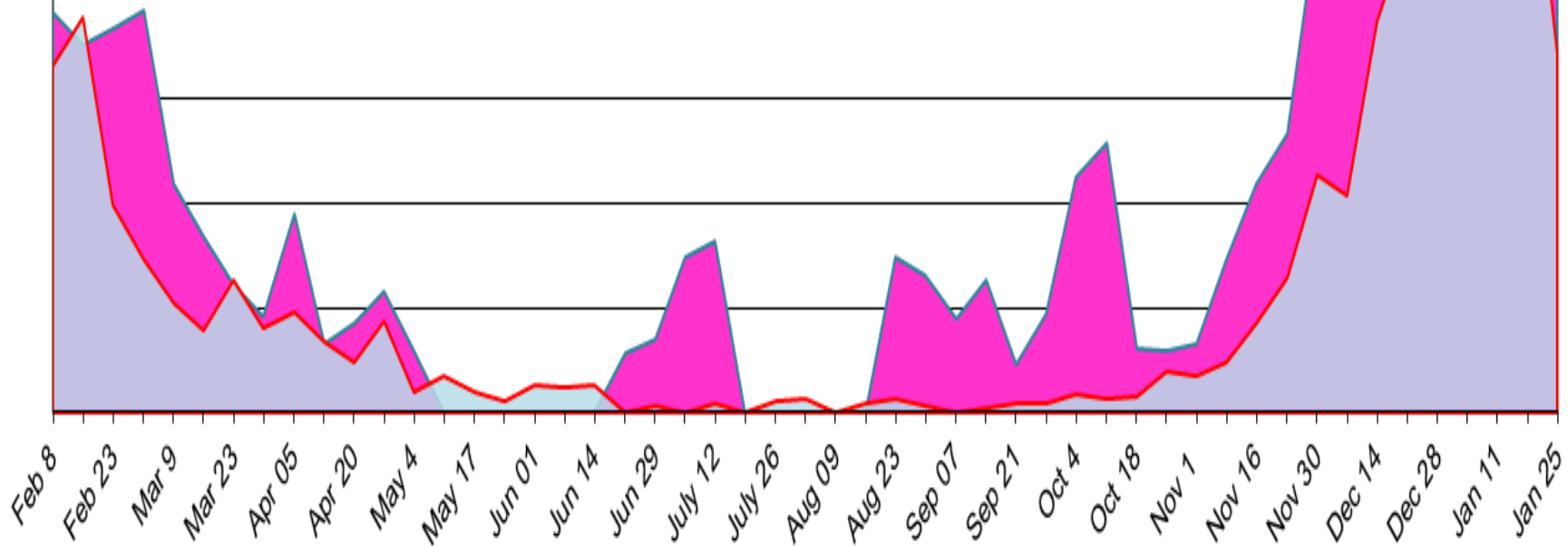
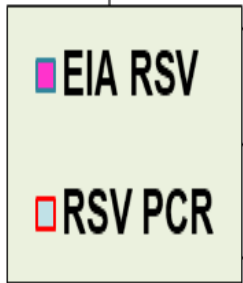
■ All Para

■ All Corona

■ Adeno

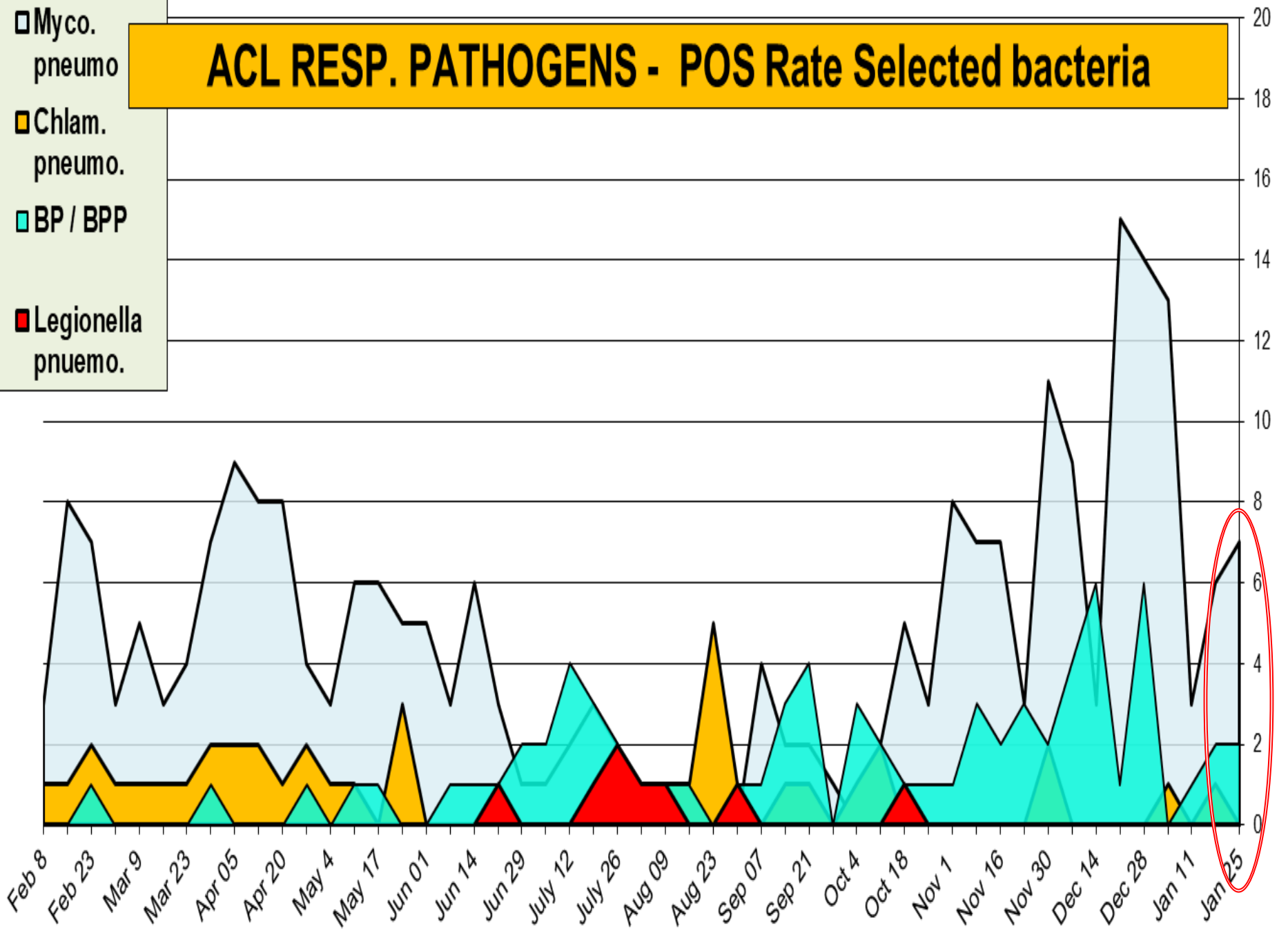


ACL RESP. PANEL - RSV PCR - 7%, RSV EIA - 13%

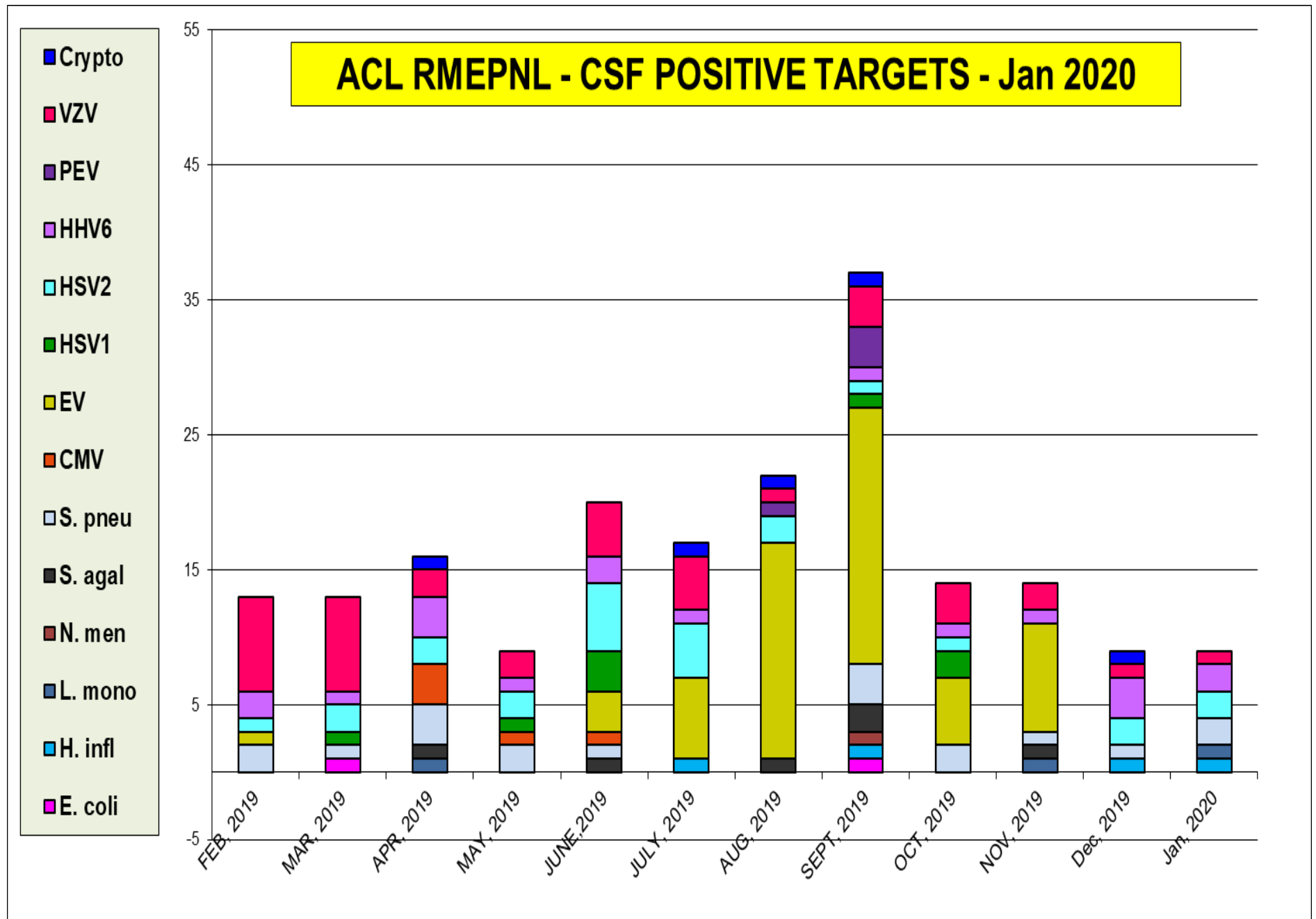


ACL RESP. PATHOGENS - POS Rate Selected bacteria

- Myco. pneumo.
- Chlam. pneumo.
- BP / BPP
- Legionella pneumo.

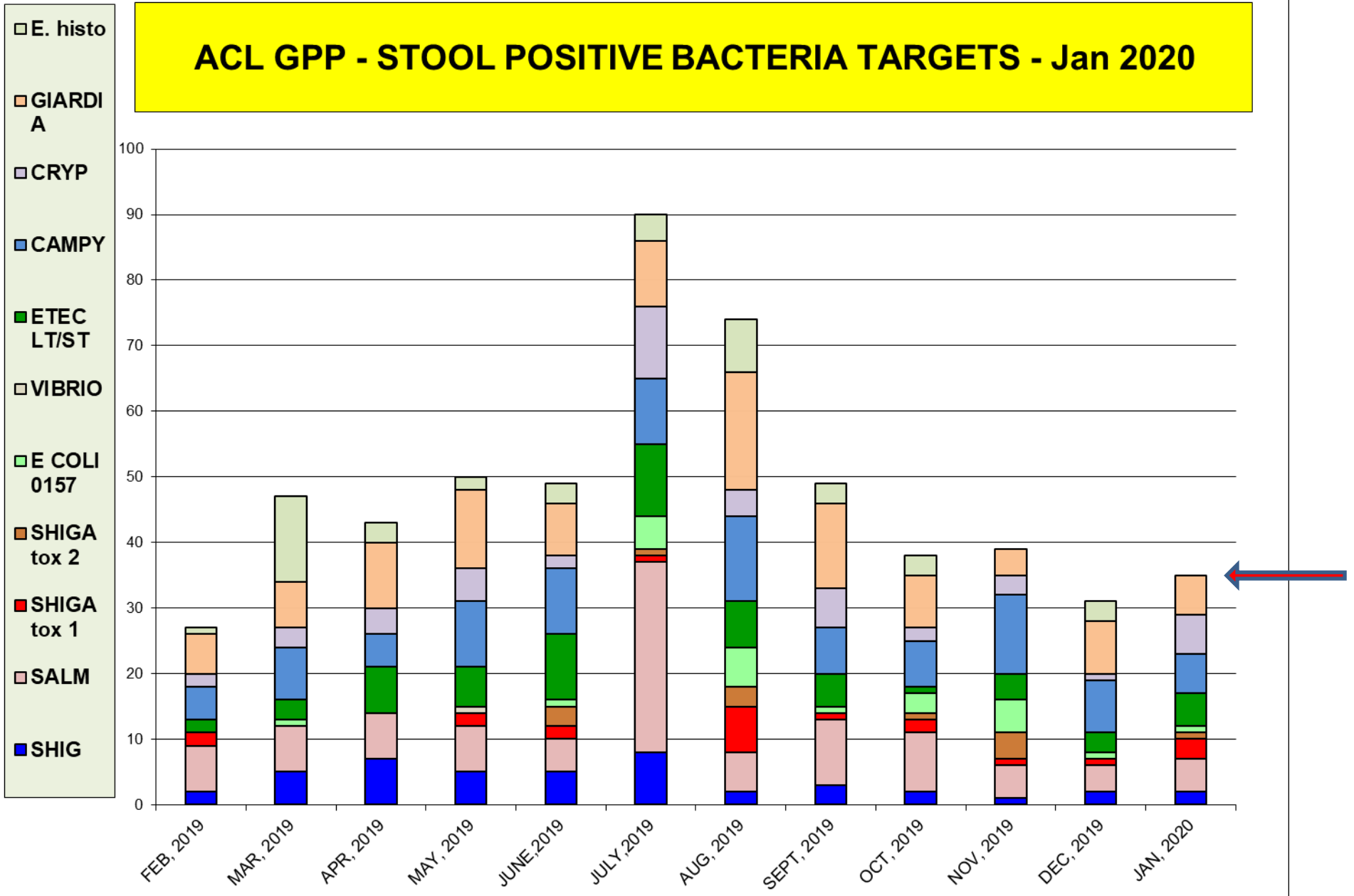


The most prevalent target is HSV2 (all CSF viruses pos rate is 5.7 %)

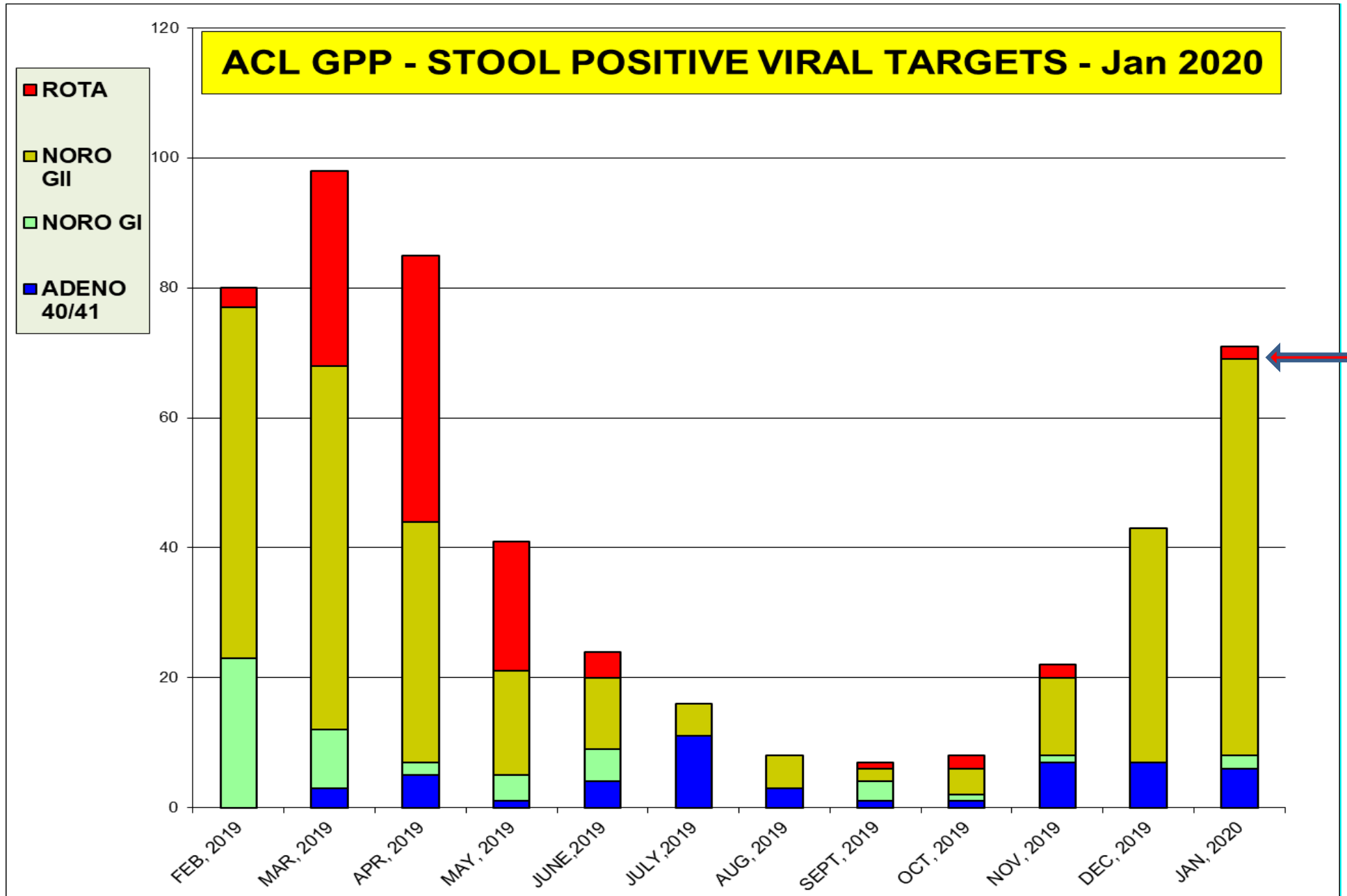


The most prevalent bacterial target Campy, Crypto, Salmonella

ACL GPP - STOOL POSITIVE BACTERIA TARGETS - Jan 2020



The most prevalent virus target is **Norovirus 16%**



| BV | C.ALB | C.GLB | C.KUR | T.VAG | M.GEN | M.HOM | U.PAV | Tot. Test |
|-------------|-------------|------------|------------|------------|------------|-------------|-------------|-------------|
| 4,820 | 4,820 | 4,820 | 4,820 | 4,820 | 4,820 | 4,820 | 4,820 | 4820 |
| 23.4 | 18.1 | 2.2 | 0.4 | 3.3 | 1.6 | 10.8 | 29.0 | 88.9 |

