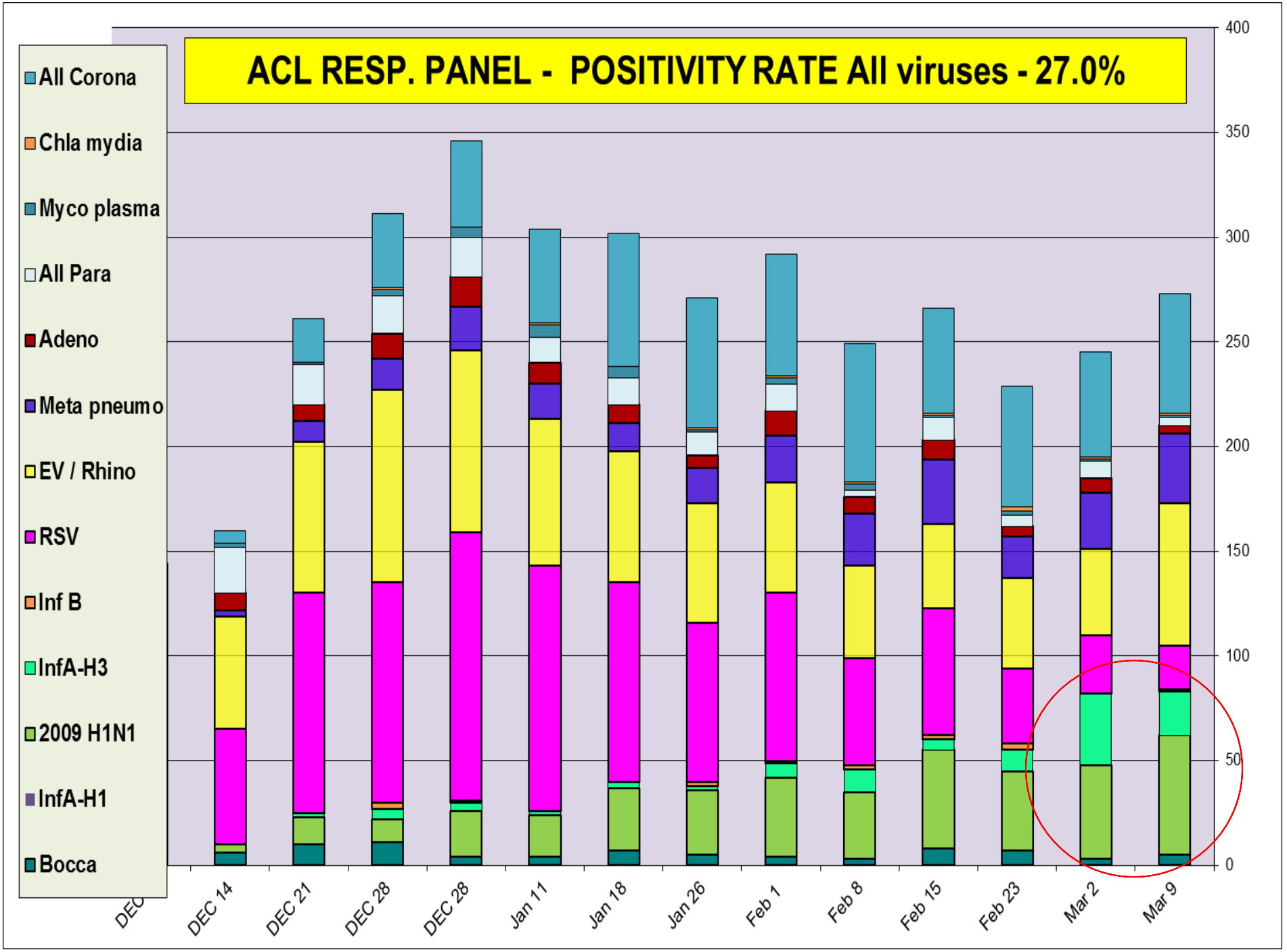
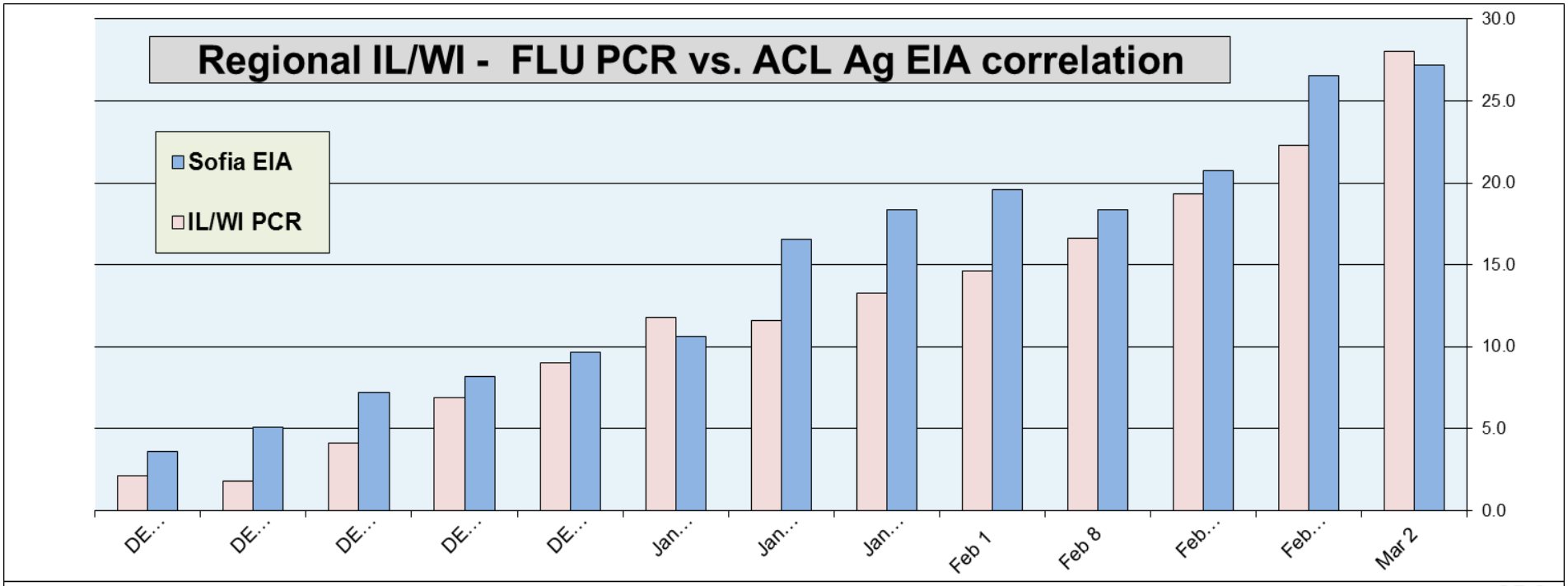
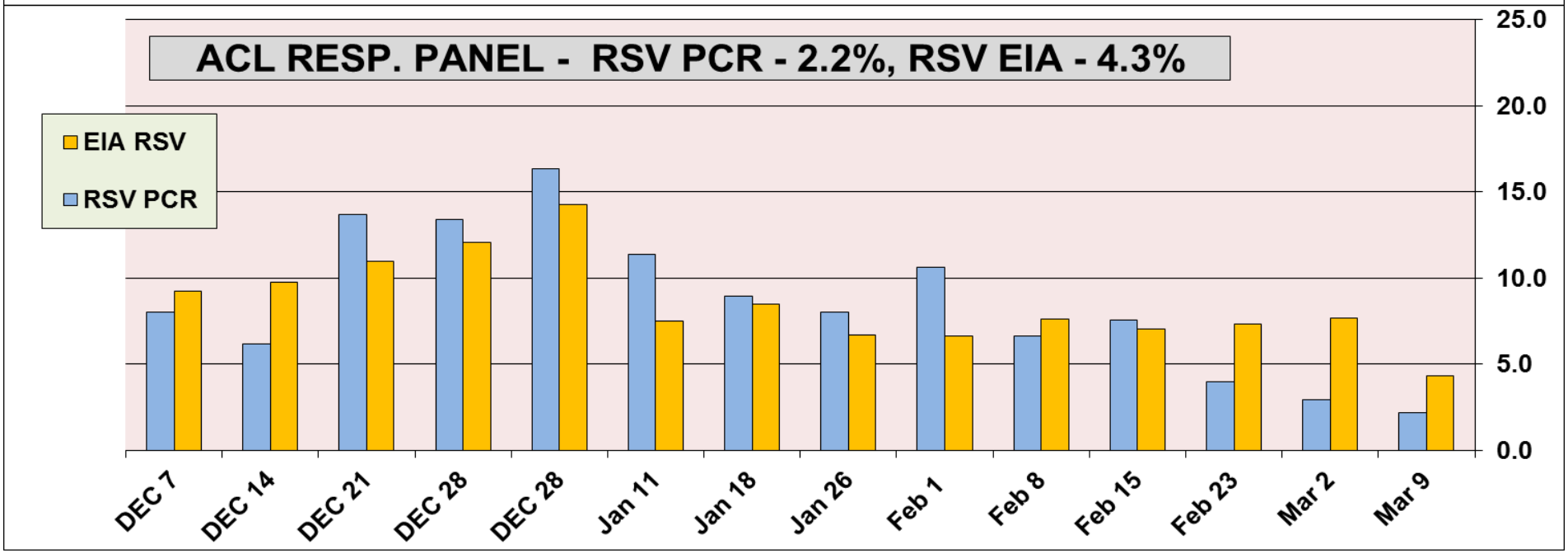
Respiratory Pathogens Dec 7 2018 - Mar 9 2019

Week Beginning	InfA-H1	InfA-H3	2009 H1N1	Inf B	RSV	All Para	EV / Rhino	Meta pneumo	Adeno	All Corona	Bocca	Myco plasma	Chla mydia	Total Pos	POS FLU	Total	ACL %FLU	US %FLU	IL/WI PCR	Sofia EIA
Mar 9	0	21	57	1	21	4	68	33	4	57	5	1	1	273	79	1011	7.8	n/a	n/a	28.9
Mar 2	0	34	45	0	28	8	41	27	7	50	3	1	1	245	79	961	8.2	26.1	28.0	27.2
Feb 23	0	10	38	3	36	5	43	20	5	58	7	2	2	229	51	908	5.6	26.7	22.3	
Feb 15	0	5	47	2	61	11	40	31	9	50	8	1	1	266	54	807	6.7	24.6	19.3	
Feb 8	0	11	32	2	51	3	44	25	8	66	3	3	1	249	45	767	5.9	21.6	16.6	18.4
Feb 1	0	7	38	1	80	13	53	22	12	58	4	3	1	292	46	751	6.1	19.2	14.6	19.6
Jan 26	0	2	31	2	76	11	57	17	6	62	5	1	1	271	35	947	3.7	15.7	13.3	18.3
Jan 18	0	3	30	0	95	13	63	13	9	64	7	5	0	302	33	1064	3.1	12.7	11.6	16.6
Jan 11	0	2	20	0	117	12	70	17	10	45	4	6	1	304	22	1026	2.1	12.7	11.8	10.6
DEC 28	0	4	22	1	128	19	87	21	14	41	4	5	0	346	27	812	3.3	13.7	9.0	9.6
DEC 28	0	5	11	3	105	18	92	15	12	35	11	3	1	311	19	783	2.4	15.6	6.9	8.2
DEC 21	0	2	13	0	105	19	72	10	8	21	10	1	0	261	15	766	2.0	11.0	4.1	7.2
DEC 14	0	0	4	0	55	22	54	3	8	6	6	2	0	160	4	891	0.4	3.6	1.8	5.1
DEC 7	0	0	2	0	63	26	58	9	10	8	2	3	2	183	2	785	0.3	1.8	2.1	3.6

Flu PCR
% Rate


ACL RESP. PANEL - POSITIVITY RATE All viruses - 27.0%
All Corona
Chla mydia
Myco plasma
All Para
Adeno
Meta pneumo
EV / Rhino
RSV
Inf B
InfA-H3
2009 H1N1
InfA-H1
Bocca
400
350
300
250
200
150
100
50
0
DEC
DEC 14
DEC 21
DEC 28
DEC 28
Jan 11
Jan 18
Jan 26
Feb 1
Feb 8
Feb 15
Feb 23
Mar 2
Mar 9


Regional IL/WI - FLU PCR vs. ACL Ag EIA correlation
Sofia EIA
IL/WI PCR
30.0
25.0
20.0
15.0
10.0
5.0
0.0
DE...
DE...
DE...
DE...
DE...
Jan...
Jan...
Jan...
Feb 1
Feb 8
Feb...
Feb...
Mar 2

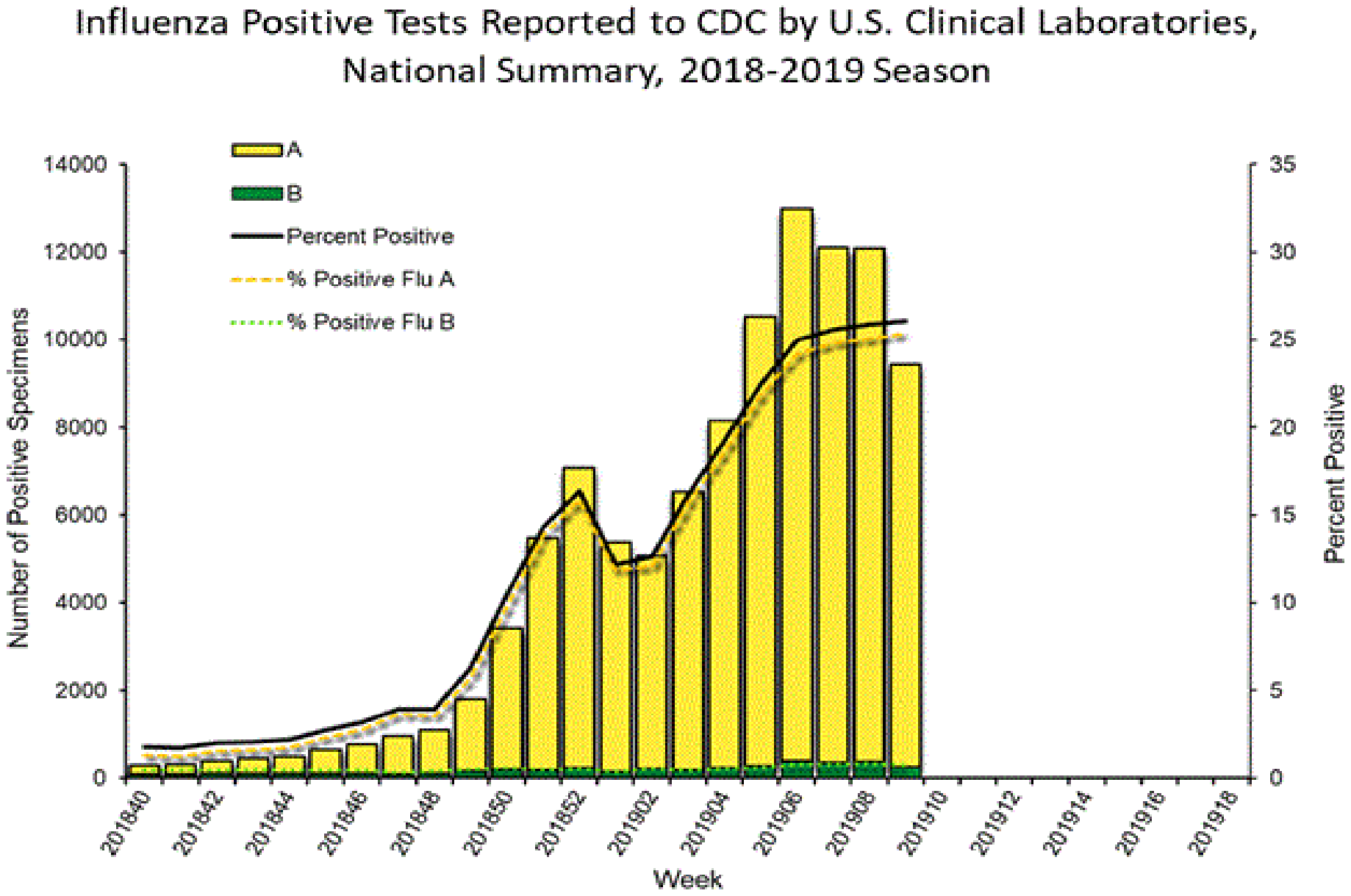

ACL RESP. PANEL - RSV PCR - 2.2%, RSV EIA - 4.3%
EIA RSV
RSV PCR
25.0
20.0
15.0
10.0
5.0
0.0
DEC 7
DEC 14
DEC 21
DEC 28
DEC 28
Jan 11
Jan 18
Jan 26
Feb 1
Feb 8
Feb 15
Feb 23
Mar 2
Mar 9

Correlation between RPPNL (FLU PCR) and Sofia (FLUAG) - Accuracy 95.8%

In Jan/Feb two months 1758 samples were tested by both methods most of them negative, 97/171 samples were positive by EIA when confirmed by PCR. 74 negative EIA samples were tested positive by PCR method. *(ACL correlation data is compiled on samples collected within <48 h). Since positive rate is under-represented and provides correlation on very small fraction of positive samples – interpret clinical sensitivity with caution.*

01/05/19 to 03/09/2019				
FLUAG (Sofia) vs RPPNL (PCR) correlation				
		RPPNL		
		+	-	Total
FluAG	+	97	8	105
	-	74	1758	1832
			Total	1937
%				
56.7	Clinical Sensitivity			
99.5	Clinical Specificity			
92.4	Positive Predictive Value (PPV)			
96.0	Negative Predictive Value (NPV)			
95.8	Accuracy			

Mar 2, 2019 **Positivity rate 26.1% -** **Flu A – 97% , Flu B – 3%**

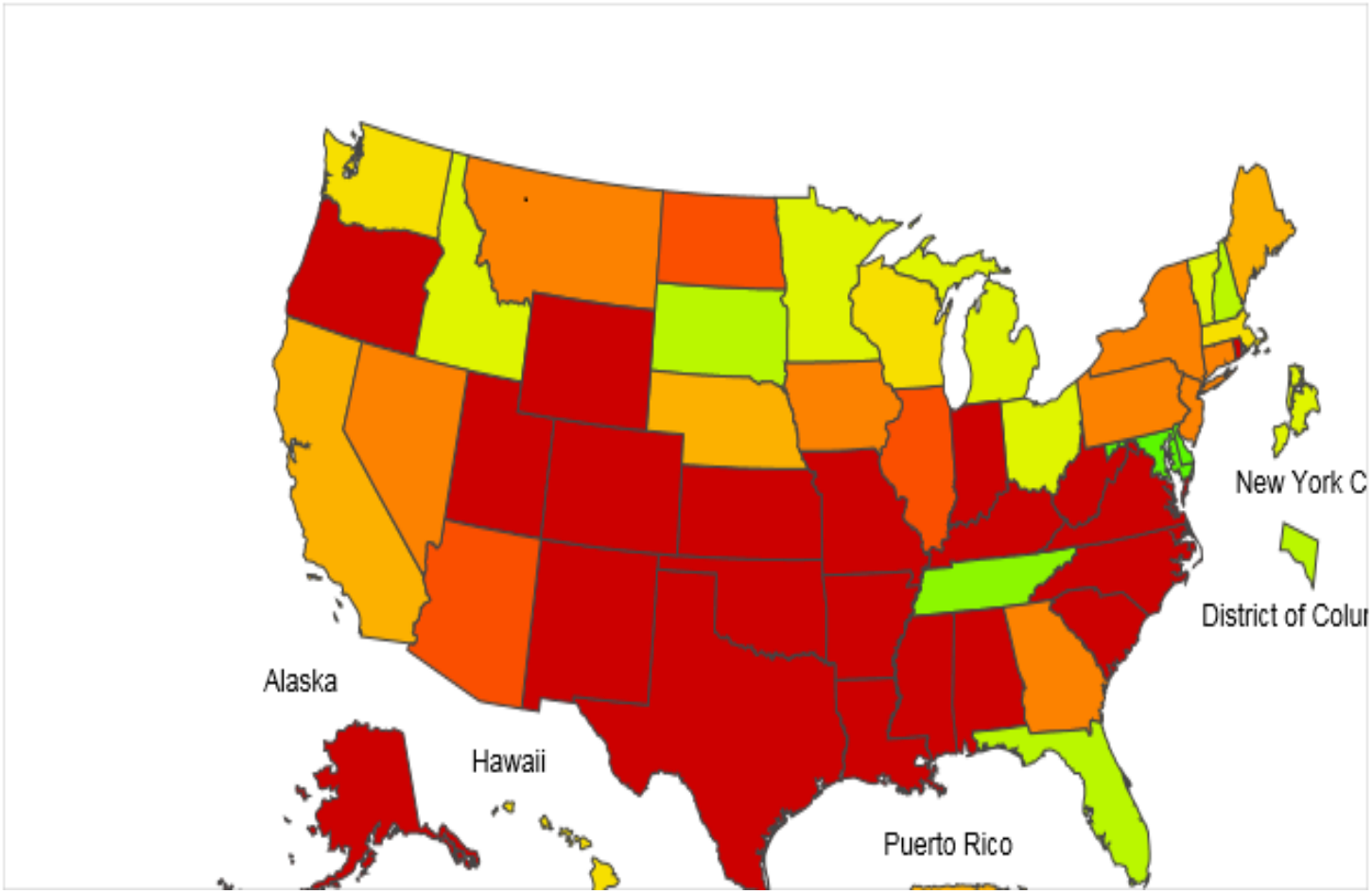


FluView

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 9 ending Mar 02, 2019



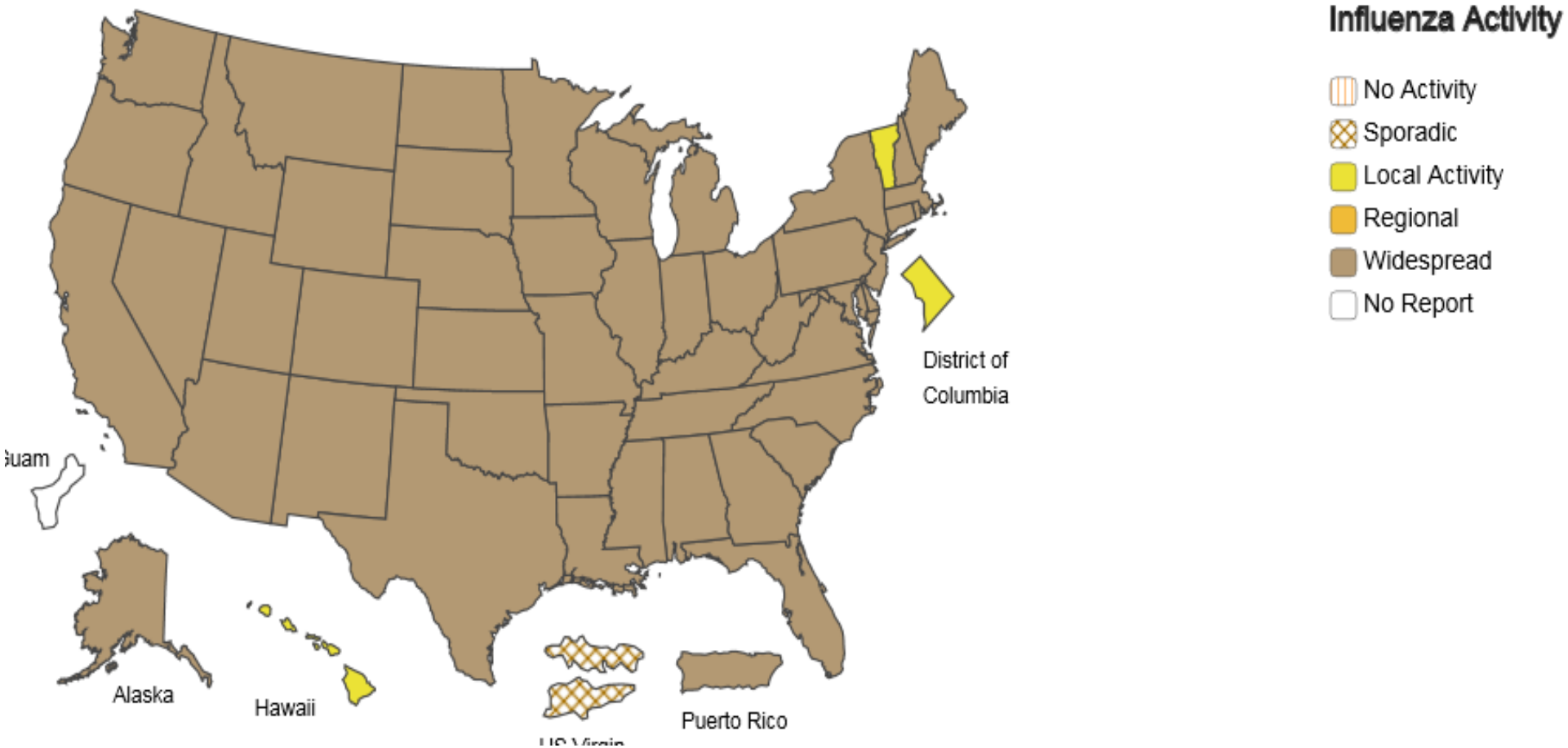
ILI Activity

- High
- Moderate
- Low
- Minimal
- Insufficient

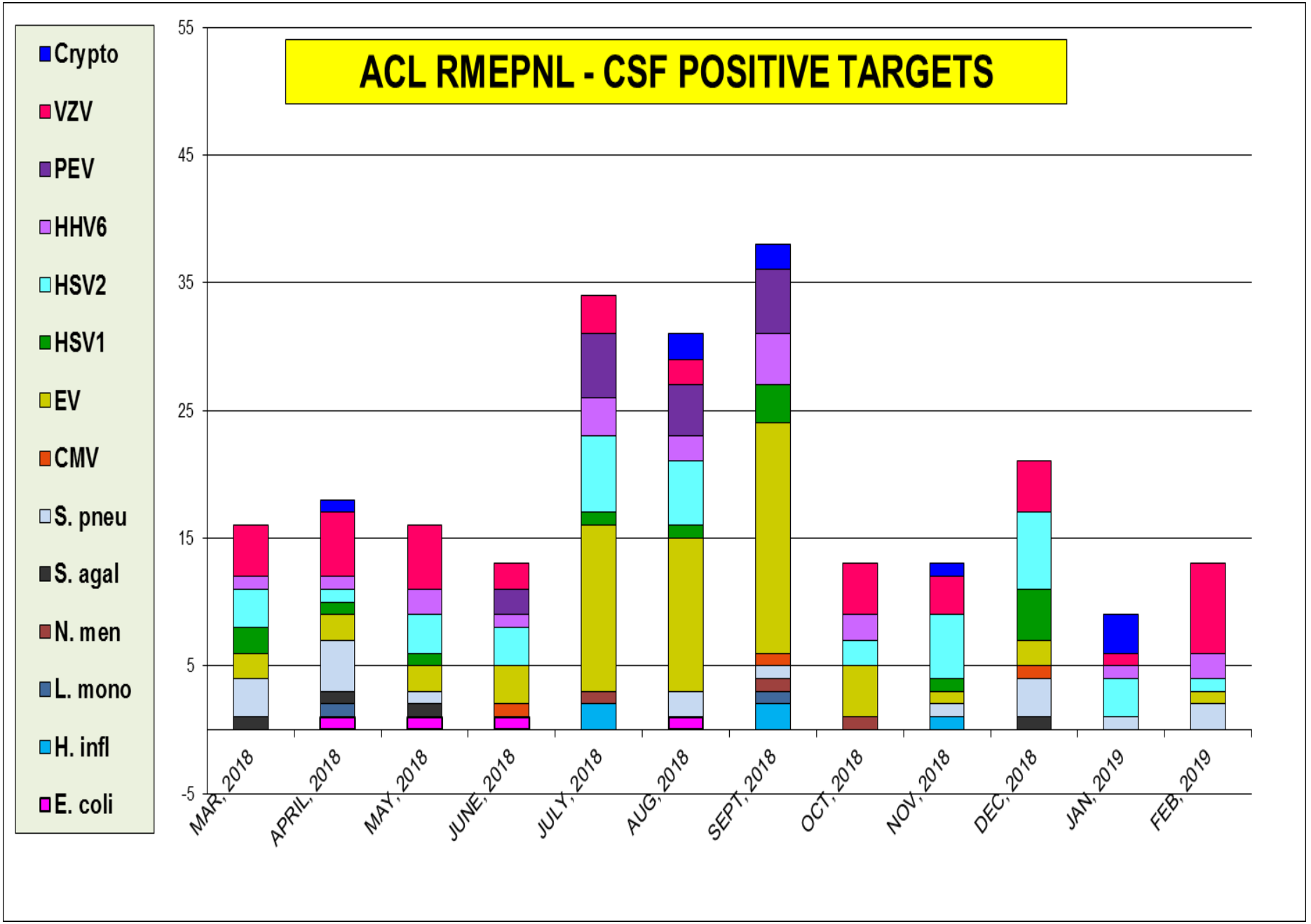
A Weekly Influenza Surveillance Report Prepared by the Influenza Division

Weekly Influenza Activity Estimates Reported by State and Territorial Epidemiologists*

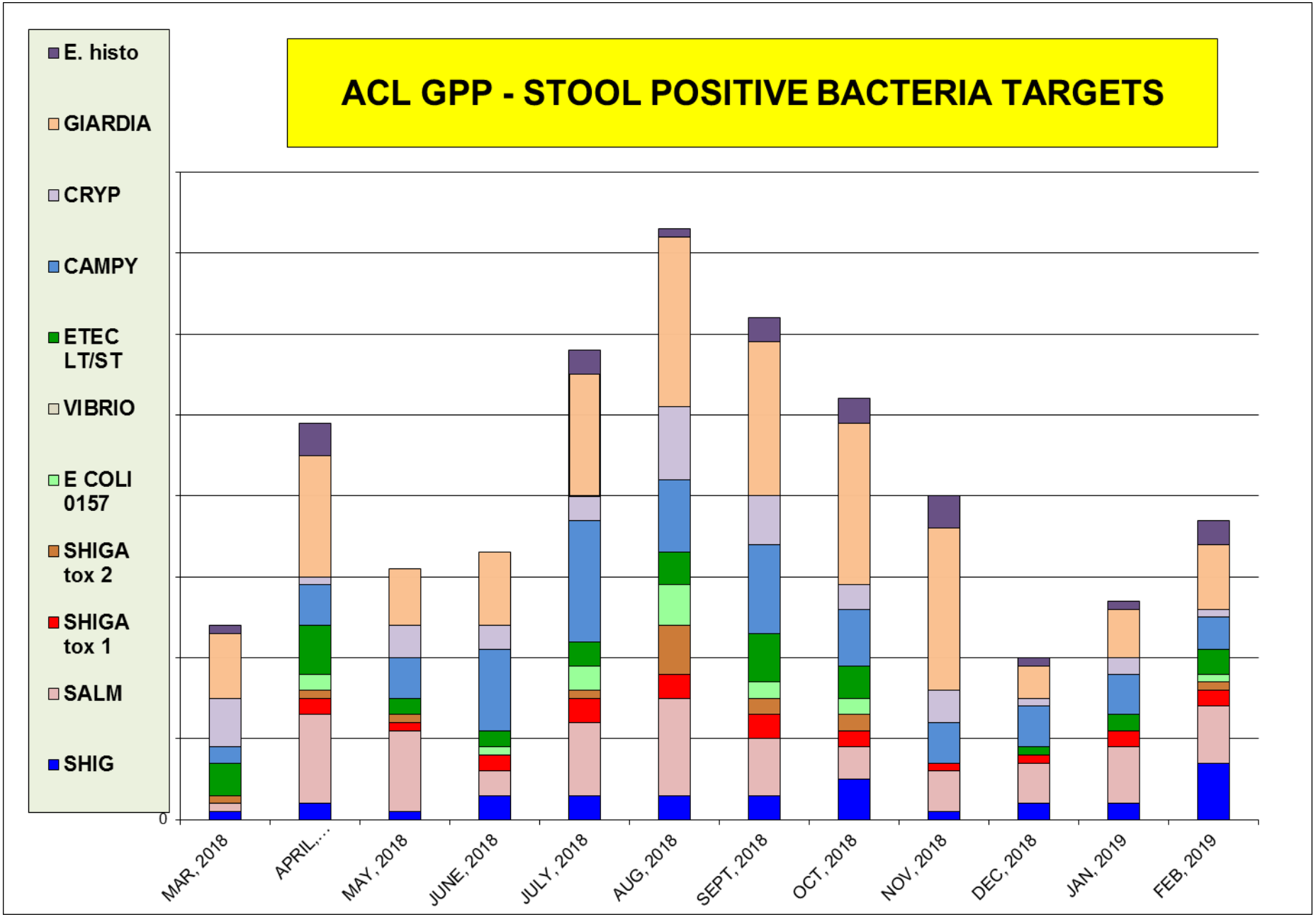
Week Ending Mar 02, 2019 - Week 9



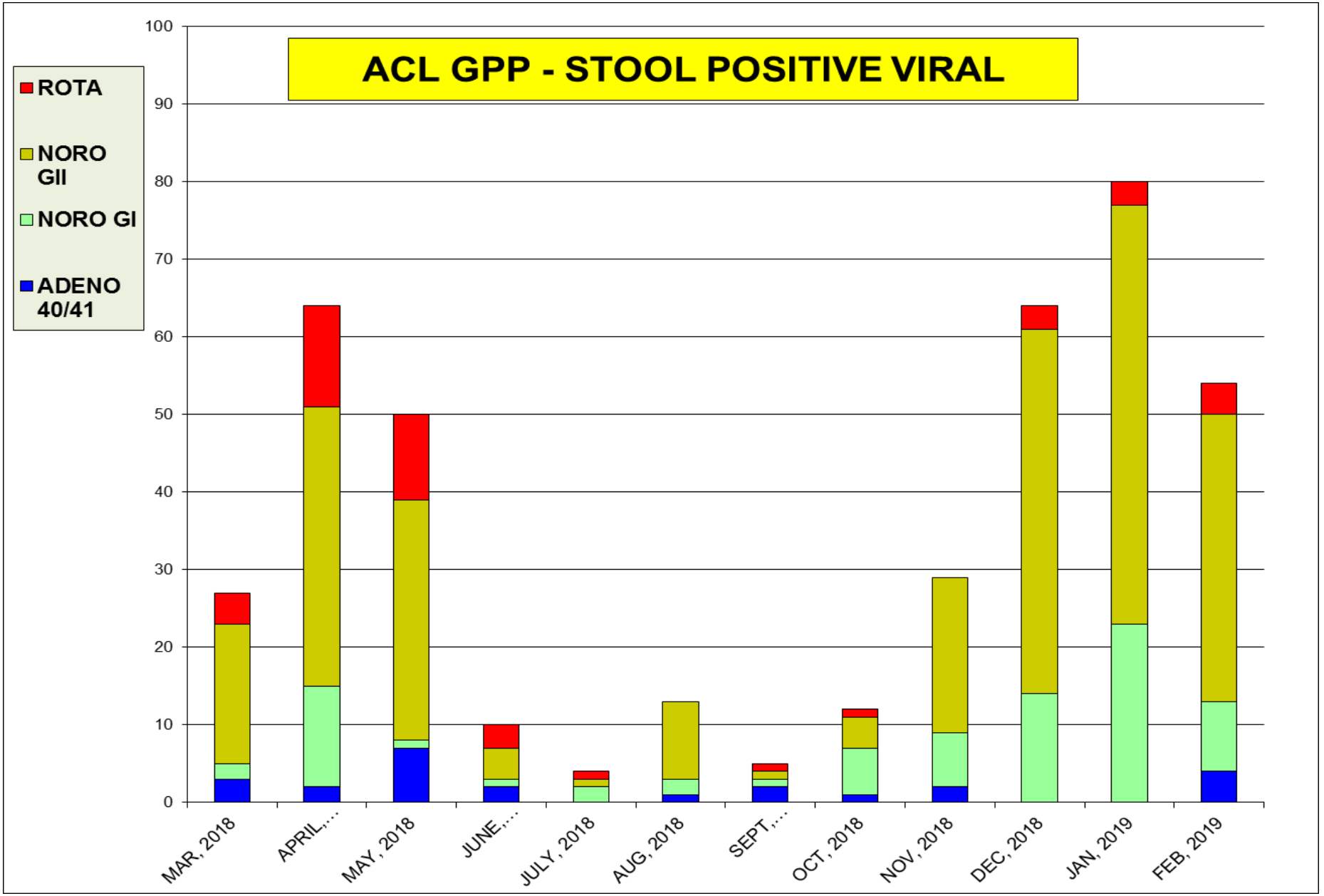
The most prevalent target **was VZV– total pos. rate 7.7%**



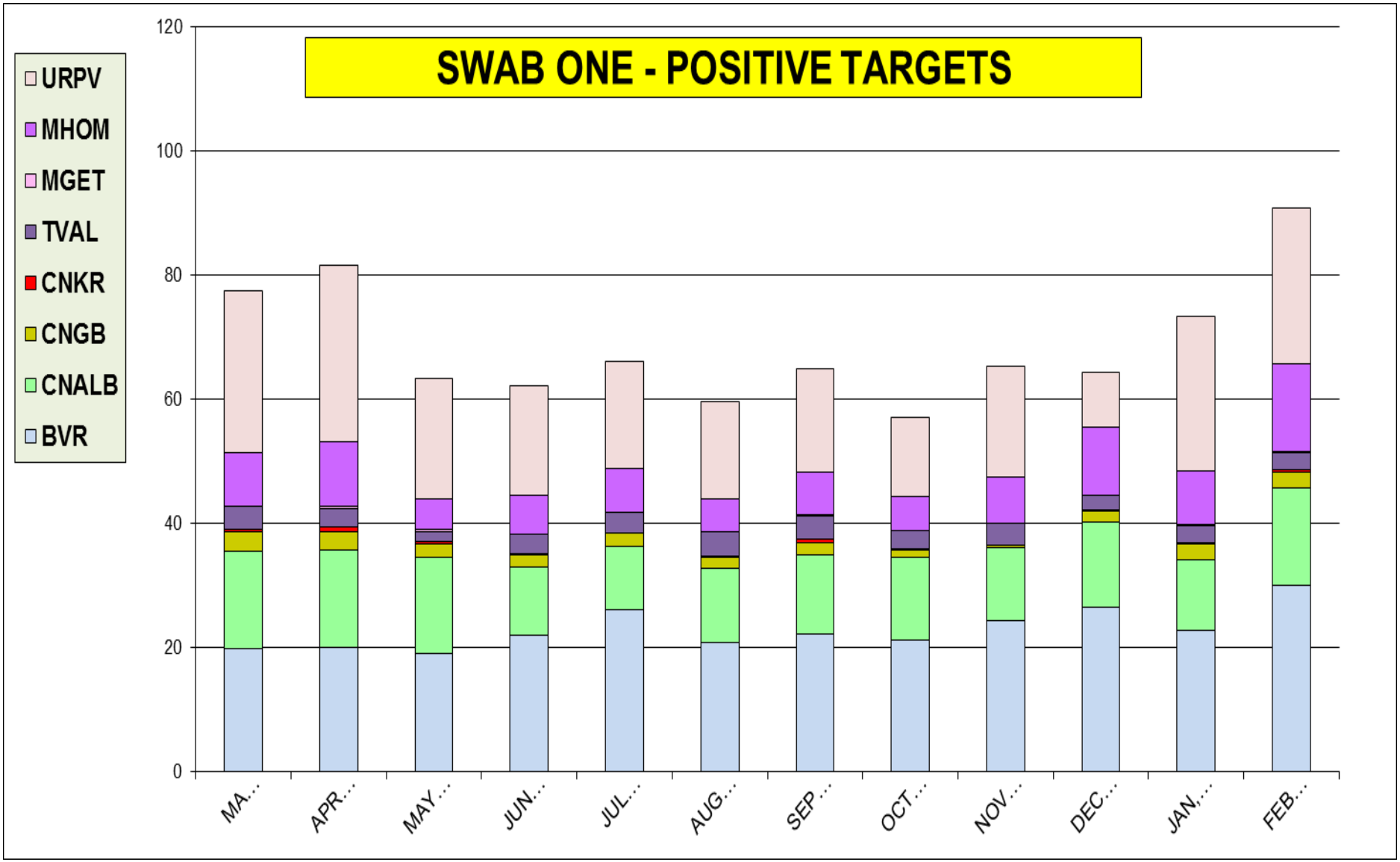
The most prevalent bacterial targets was **Salmonella and Giardia**



The most prevalent virus target was **Norovirus** type **I / II** **9.7** **%** pos. rate



BV	C.ALB	C.GLB	C.KUR	T.VAG	M.GEN	M.HOM	U.PAV	Tot. pos.
4,925	4,925	4,925	4,925	4,925	4,925	4,925	4,925	4,925
23.3	**13.1**	**2.0**	**0.3**	**3.0**	**0.1**	**8.1**	**19.1**	**69.1**



Neuraminidase Inhibitors **Resistance** in samples collected – as of Mar 2, 2019

Per CDC website	Oseltamivir		Peramivir		Zanamivir	
	Virus Samples tested (n)	Resistant Viruses, (%)	Virus Samples tested (n)	Resistant Viruses, (%)	Virus Samples tested (n)	Resistant Viruses, (%)
Influenza A (H1N1)pdm09	755	0.3	755	0.3	755	0
Influenza A (H3N2)	482	0	482	0	482	0
Influenza B	159	0	159	0	159	0

There is 0.3% resistance detected.