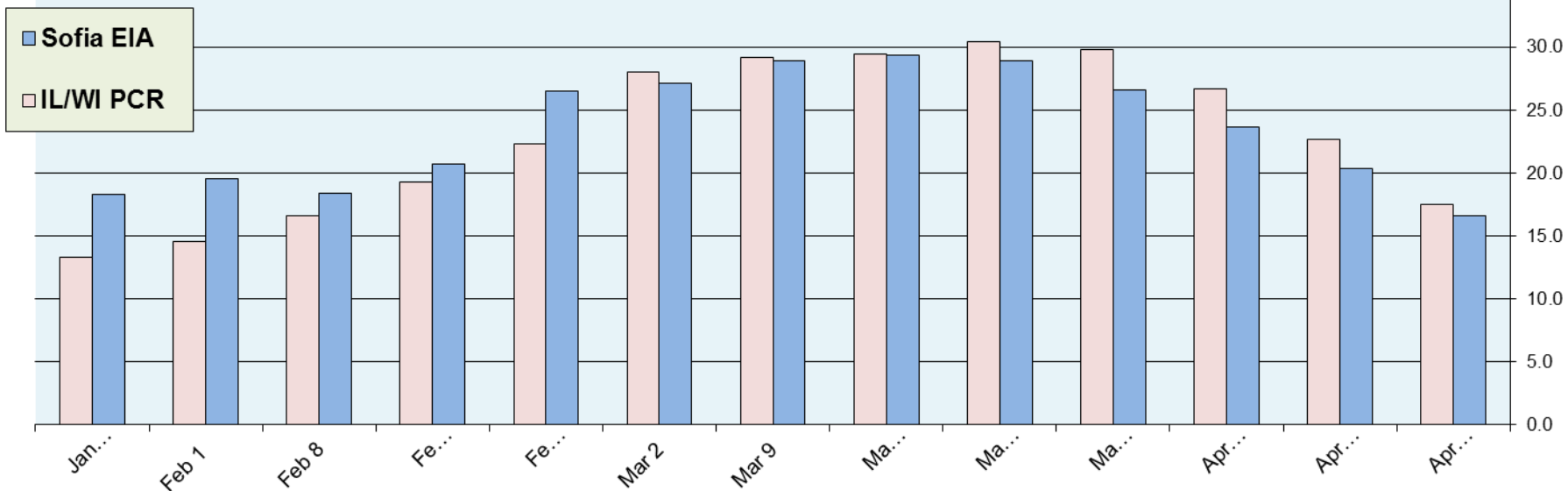


Respiratory Pathogens Jan 26 - Apr 26 2019

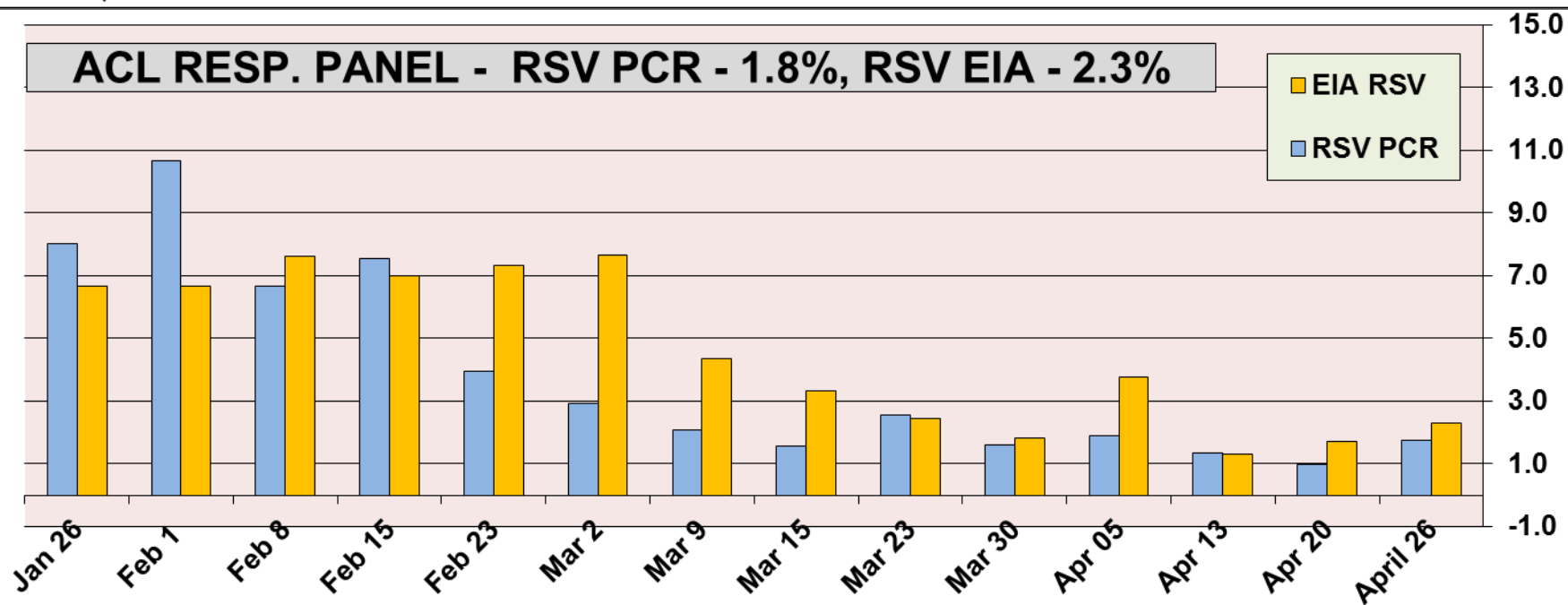
Week	InfA-H1	InfA-H3	2009 H1N1	Inf B	RSV	All Para	EV / Rhino	Meta pneumo	Adeno	All Corona	Bocca	Mycoplasma	Chlamydia	Total Pos	POS FLU	Total	ACL %FLU	US %FLU	IL/WI PCR	Sofia FIA
April 26	0	13	15	6	14	29	49	37	5	19	4	1	2	194	34	800	4.3	n/a	n/a	12.0
Apr 20	0	16	17	5	8	34	58	47	2	19	8	2	1	217	38	827	4.6	8.1	17.5	16.6
Apr 13	0	24	33	8	12	28	68	59	8	28	12	1	1	282	65	893	7.3	11.8	22.7	25.1
Apr 05	0	55	26	7	17	33	62	35	5	40	1	1	3	285	88	893	9.9	15.1	26.7	25.1
Mar 30	0	37	45	3	15	25	56	31	6	34	11	1	2	266	85	936	9.1	18.1	29.8	26.6
Mar 23	0	48	40	8	25	20	60	34	6	35	4	0	1	281	96	984	9.8	22.1	30.4	28.9
Mar 15	0	39	65	2	17	15	42	23	7	45	3	0	1	259	106	1076	9.9	26.0	29.5	29.4
Mar 9	0	21	57	1	21	4	68	33	4	57	5	1	1	273	79	1011	7.8	25.8	29.2	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	26.5
Feb 15	0	5	47	2	61	11	40	31	9	50	8	1	1	266	54	807	6.7	24.6	19.3	20.7
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

Flu PCR
% Rate

Regional IL/WI - FLU PCR 17.5 vs. ACL EIA 16.6 correlation



ACL RESP. PANEL - RSV PCR - 1.8%, RSV EIA - 2.3%



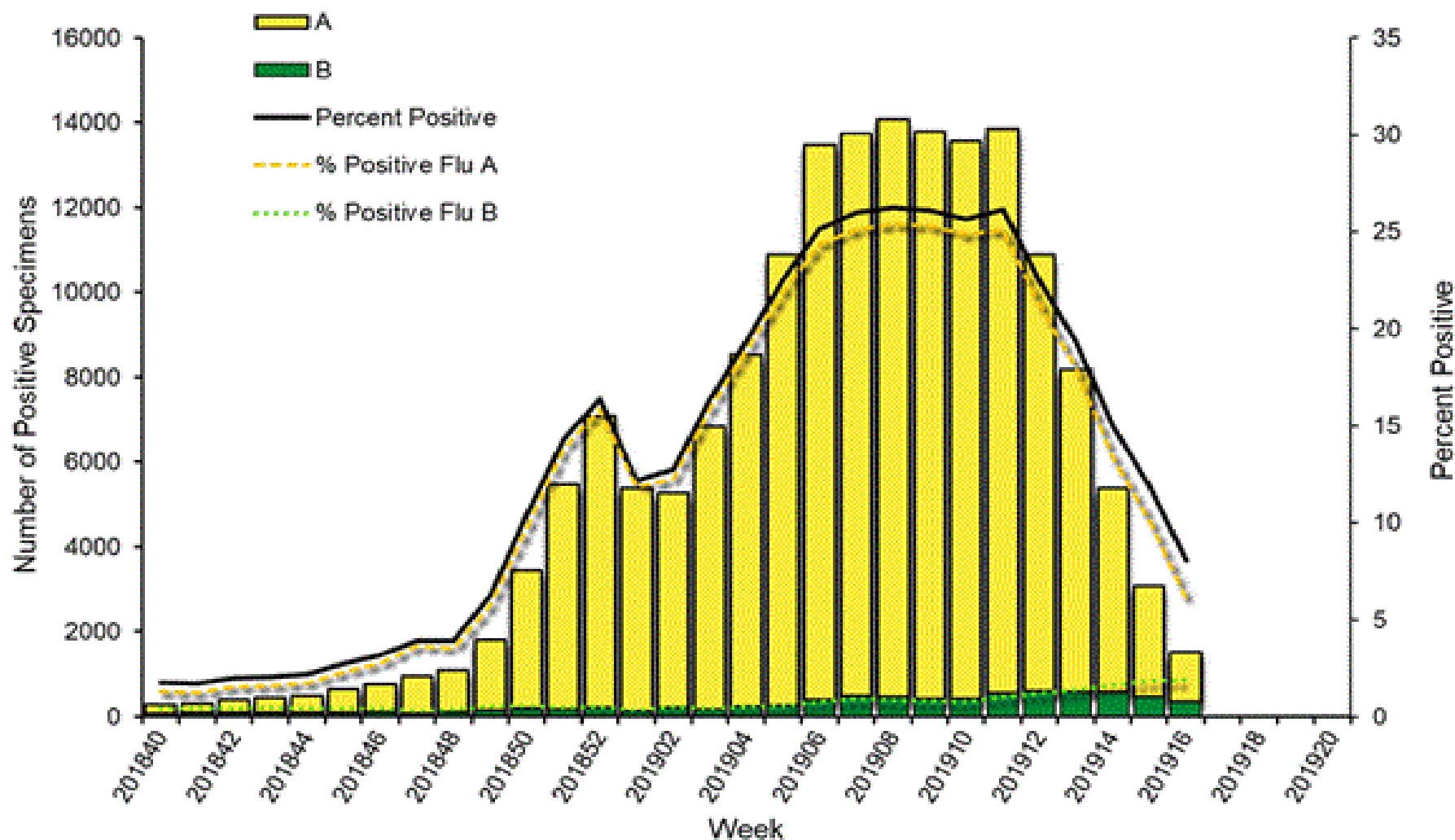
Correlation between RPPNL (FLU PCR) and Sofia (FLUAG) - Accuracy is 94%

In last three months, a 2716 samples were tested by both methods most of them negative, 158/3093 samples were positive by EIA when confirmed by PCR. 157 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.*

02/02/19 to 04/27/2019				
FLUAG (Sofia) vs RPPNL (PCR) correlation				
		RPPNL		
		+	-	Total
FluAG	+	158	4	162
	-	157	2397	2554
			Total	2716
%				
50.2	Clinical Sensitivity			
99.8	Clinical Specificity			
97.5	Positive Predictive Value (PPV)			
93.9	Negative Predictive Value (NPV)			
94.1	Accuracy			

Apr 20, 2019 **Positivity rate 8.1%** - Flu A – 76% , Flu B – 24%

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

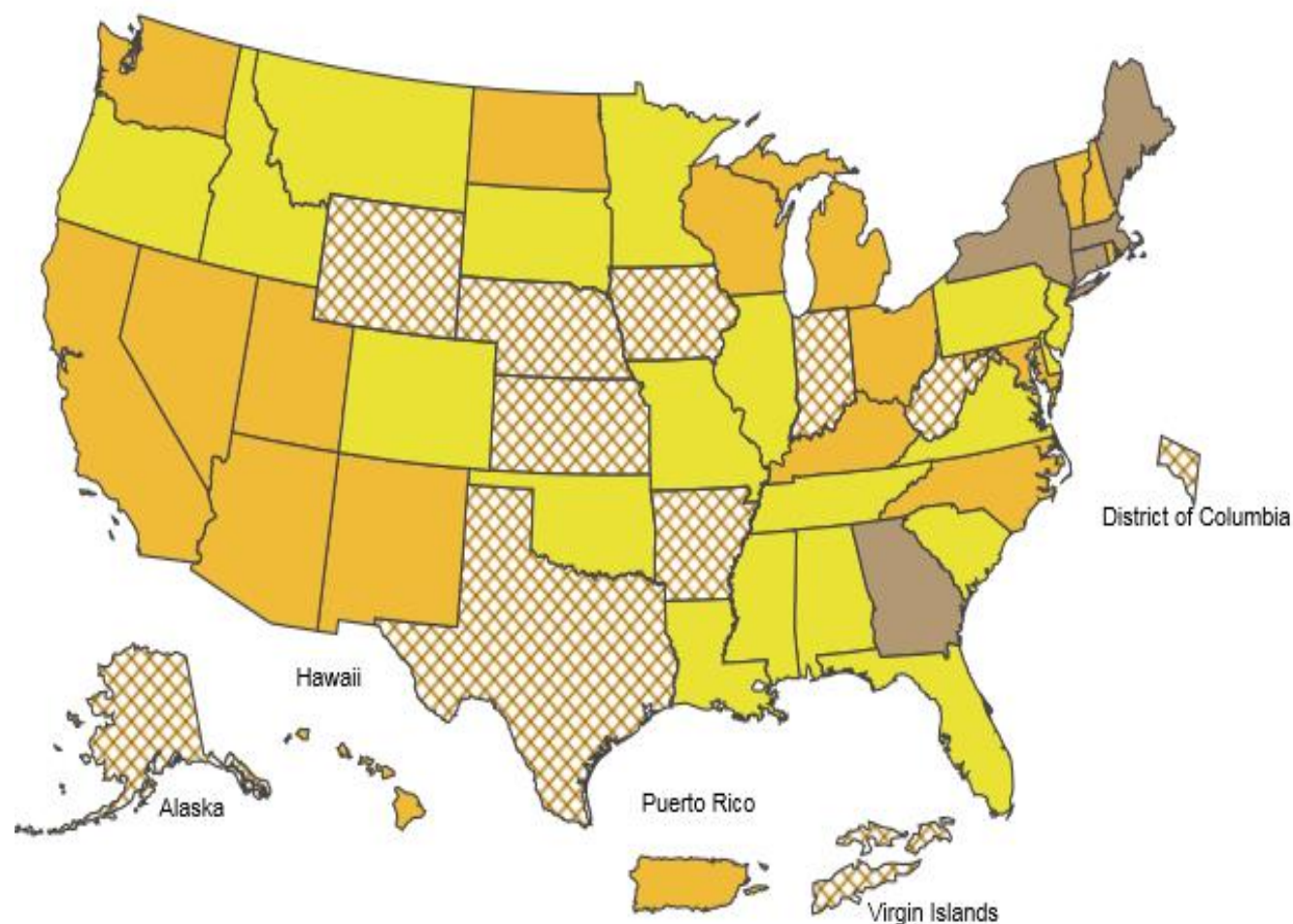


Weekly Influenza Activity Estimates Reported by State and Territorial Epidemiologists*

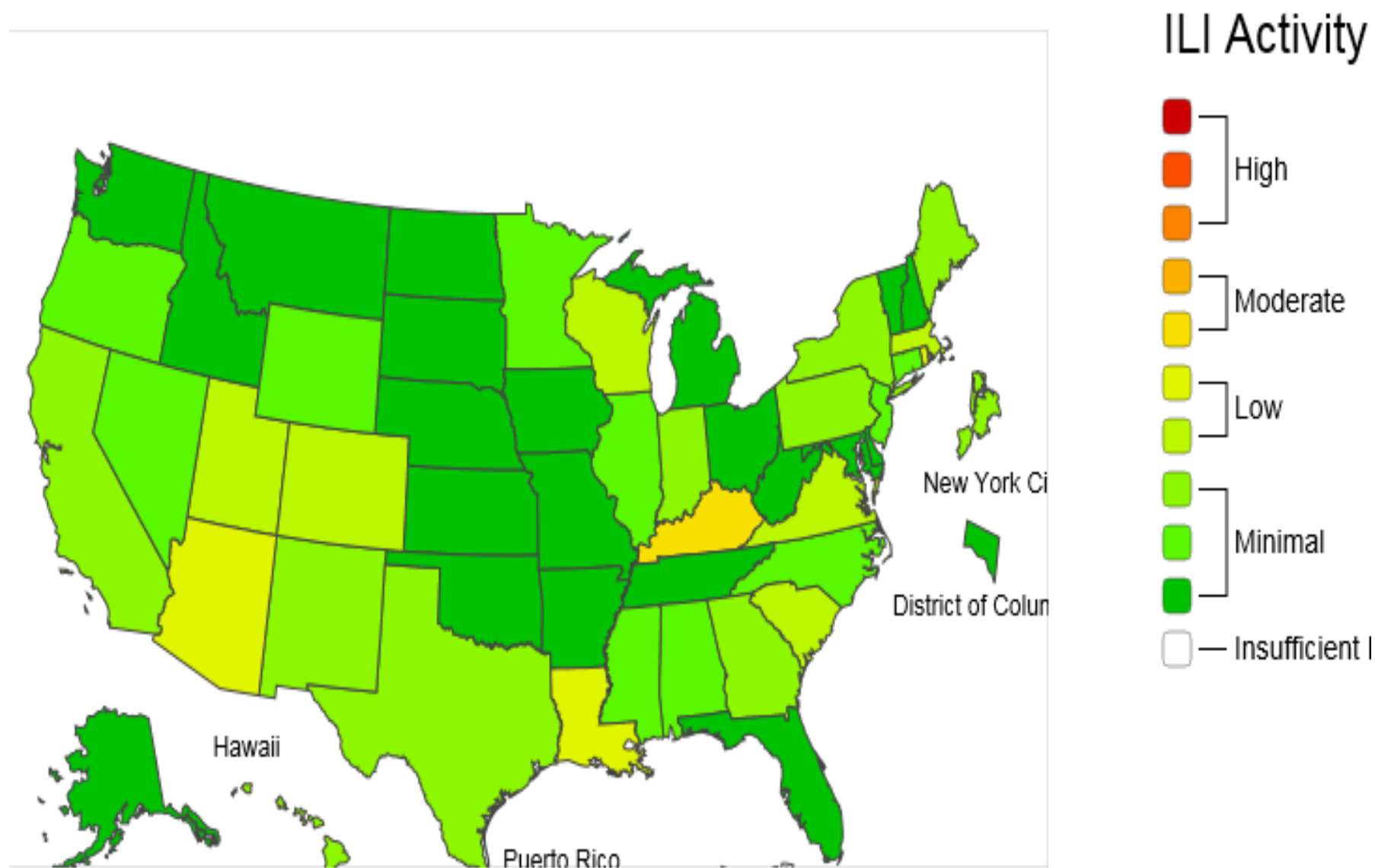
Week Ending Apr 20, 2019 - Week 16

Influenza Activity

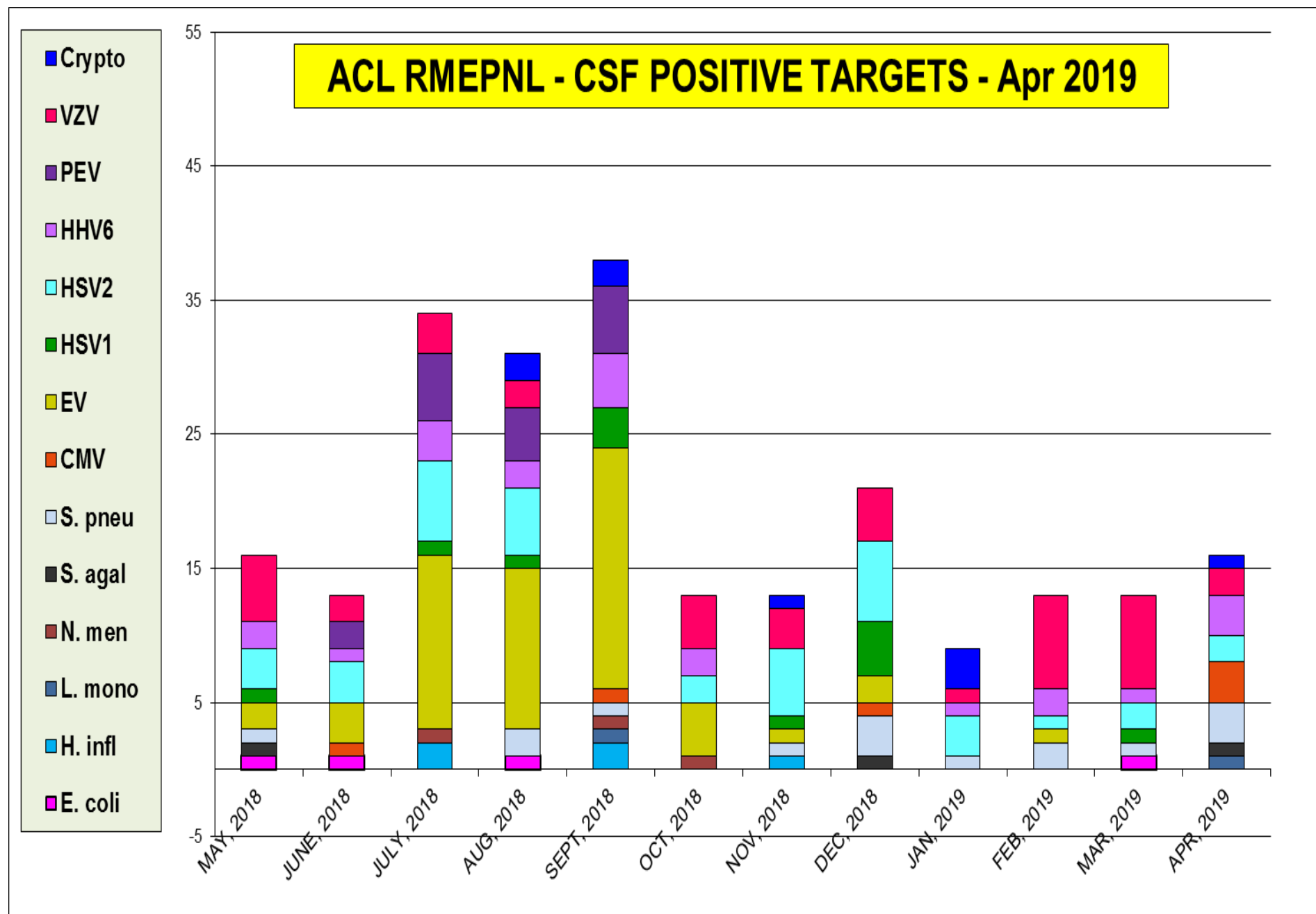
- No Activity
- Sporadic
- Local Activity
- Regional
- Widespread
- No Report



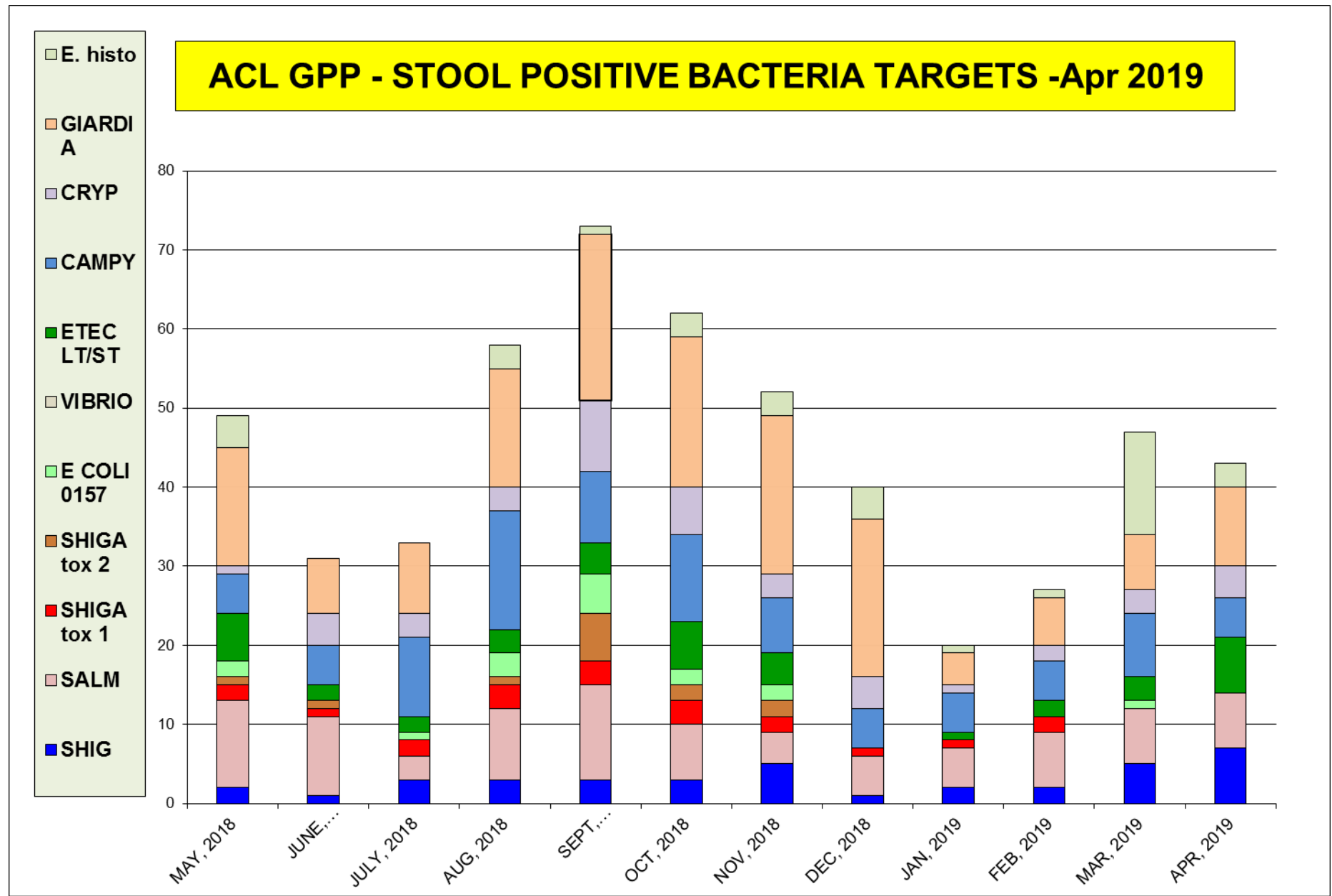
2018-19 Influenza Season Week 16 ending Apr 20, 2019



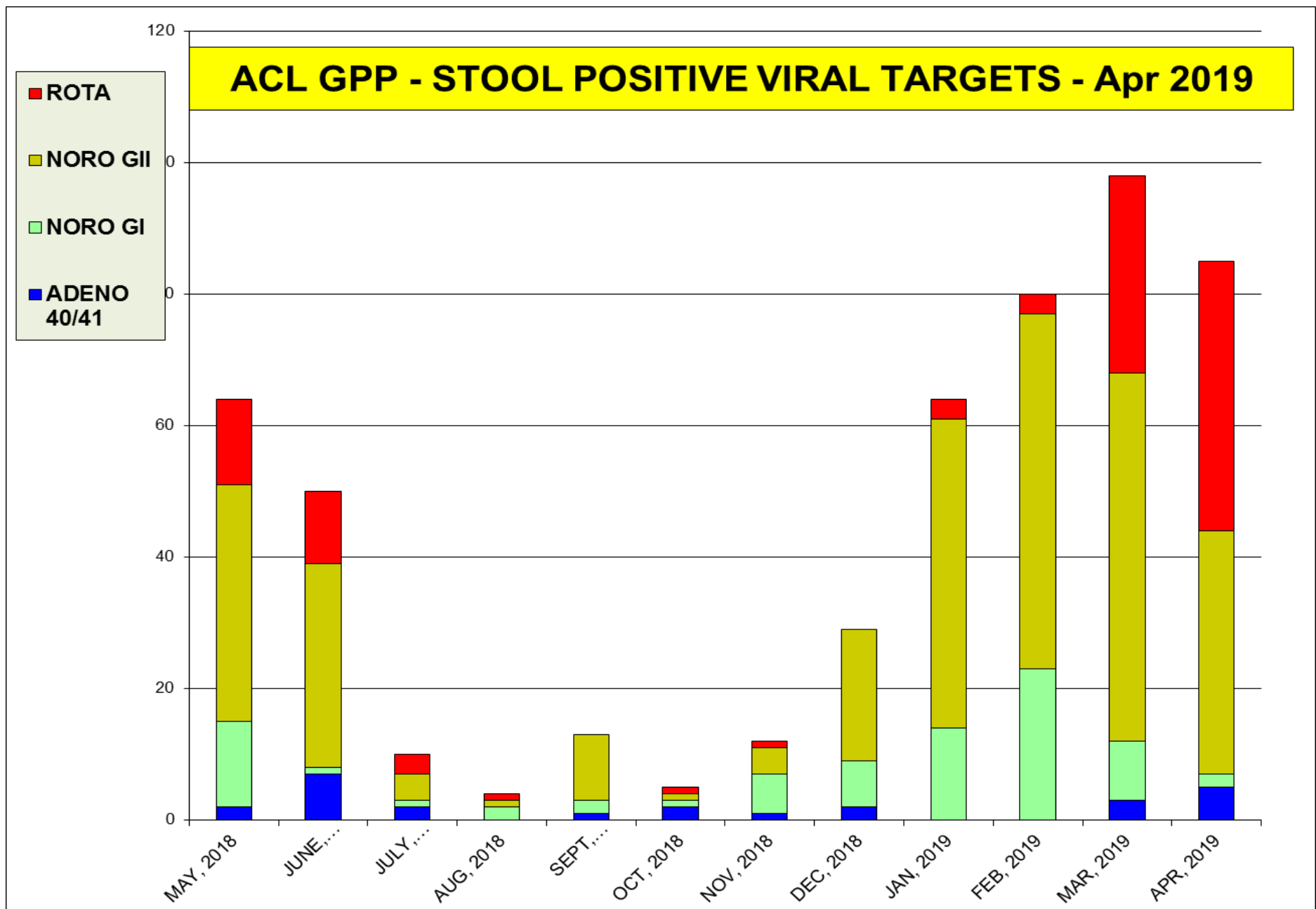
The most prevalent targets were **CMV**, **HHV6**, **S. pneumo** – total pos. rate 9.9%



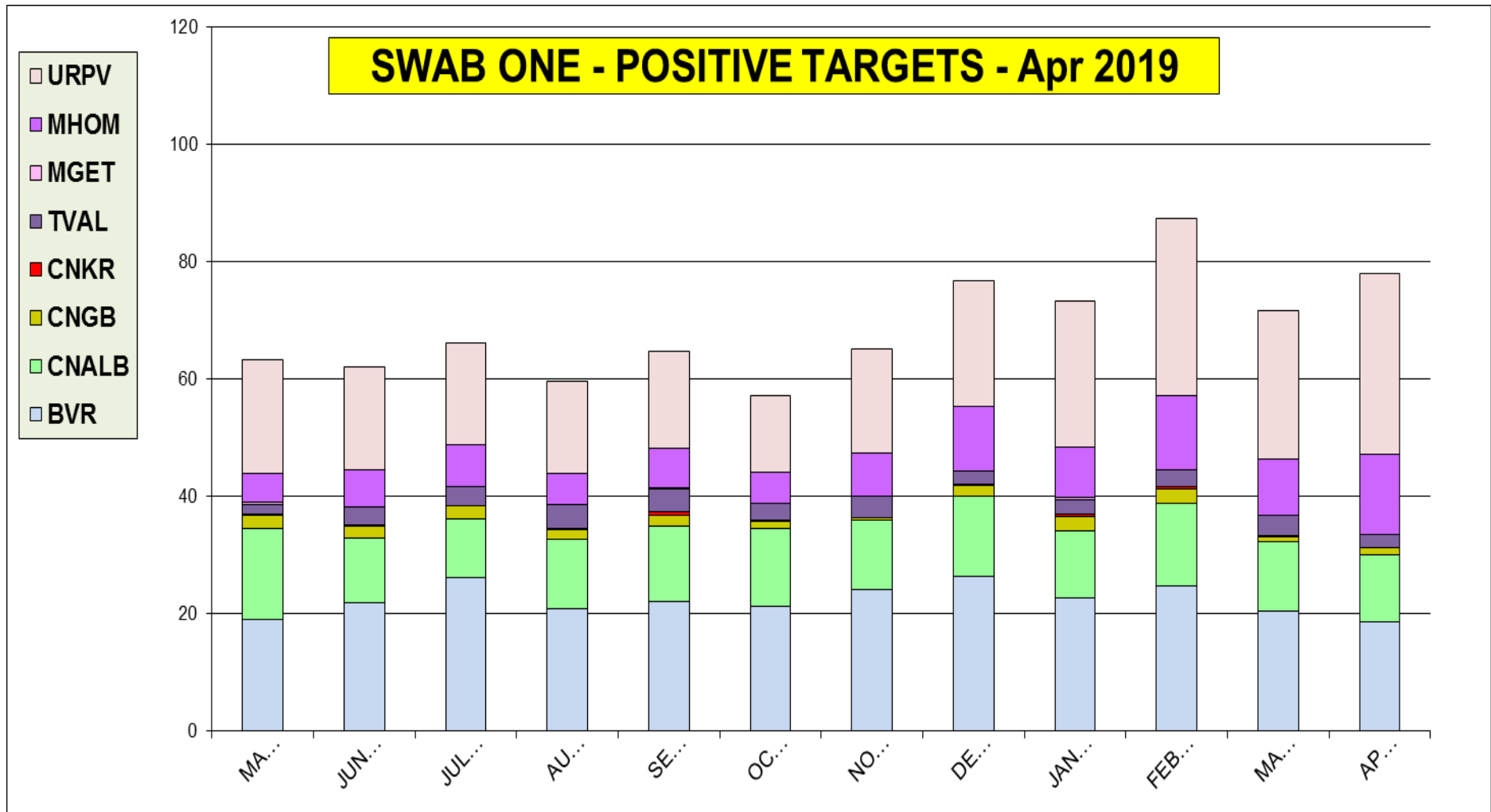
The most prevalent bacterial targets was **Giardia**



The most prevalent virus target were; **Norovirus (7.5%)** and **Rotavirus (9.2%)** pos. rate



BV	C.ALB	C.GLB	C.KUR	T.VAG	M.GEN	M.HOM	U.PAV	Tot. pos.
5,525	5,525	5,525	5,525	5,525	5,525	5,525	5,525	5,525
22.3	12.4	1.7	0.2	3.0	0.1	8.5	21.5	68.8



Neuraminidase Inhibitors Resistance in samples collected – as of Apr 20, 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	1006	0.1	1006	0.1	1006	0
Influenza A (H3N2)	789	0	789	0	789	0
Influenza B	282	0	282	0	282	0

There is 0.1% resistance detected.